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CM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 12.25 Seconds  
(without alignments)  
59.001 Million cell updates/sec

Title: US-09-603-832-5

Sequence: 1 NDWEDRYRENNMR 14

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents AA:\*

1: /cgn2\_6/ptodata/2/1aa/5A.COMB.pep:\*  
2: /cgn2\_6/ptodata/2/1aa/5B.COMB.pep:\*  
3: /cgn2\_6/ptodata/2/1aa/6A.COMB.pep:\*  
4: /cgn2\_6/ptodata/2/1aa/6B.COMB.pep:\*  
5: /cgn2\_6/ptodata/2/1aa/PCTUS.COMB.pep:\*  
6: /cgn2\_6/ptodata/2/1aa/backfiles1.pep:\*

Prod. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	254	1	US-08-242-188-1 Sequence 1, Appli
2	86	100.0	254	1	US-08-509-261A-1 Sequence 1, Appli
3	86	100.0	254	1	US-08-660-626-7 Sequence 7, Appli
4	86	100.0	254	2	US-08-692-892-1 Sequence 1, Appli
5	86	100.0	254	2	US-08-713-939A-1 Sequence 1, Appli
6	86	100.0	254	2	US-08-868-162A-21 Sequence 21, Appli
7	86	100.0	254	3	US-09-031-168-7 Sequence 7, Appli
8	86	100.0	254	3	US-09-128-450-19 Sequence 19, Appli
9	86	100.0	254	3	US-09-128-450-28 Sequence 28, Appli
10	86	100.0	254	3	US-09-036-579-1 Sequence 1, Appli
11	86	100.0	254	4	US-09-823-494-19 Sequence 19, Appli
12	86	100.0	254	4	US-09-823-494-28 Sequence 28, Appli
13	86	100.0	254	4	US-09-550-374-1 Sequence 1, Appli
14	86	100.0	254	4	US-09-431-887-20 Sequence 20, Appli
15	86	100.0	254	4	US-09-431-887-21 Sequence 21, Appli
16	86	100.0	254	4	US-09-431-887-22 Sequence 22, Appli
17	86	100.0	254	4	US-09-627-218B-10 Sequence 10, Appli
18	86	100.0	254	4	US-09-943-906-1 Sequence 1, Appli
19	86	100.0	254	4	US-09-669-516C-7 Sequence 7, Appli
20	86	100.0	31	1	US-08-244-701B-8 Sequence 8, Appli
21	86	100.0	31	1	US-08-076-721-8 Sequence 8, Appli
22	86	100.0	142	1	US-08-556-823-2 Sequence 2, Appli
23	86	100.0	208	3	US-09-128-450-18 Sequence 18, Appli
24	86	100.0	208	4	US-09-823-494-18 Sequence 18, Appli
25	86	100.0	245	4	US-09-431-887-5 Sequence 5, Appli
26	86	100.0	245	4	US-09-431-887-15 Sequence 15, Appli
27	86	100.0	252	4	US-09-431-887-13 Sequence 13, Appli

28	77	89.5	252	4	US-09-431-887-17 Sequence 17, Appli
29	77	89.5	252	4	US-09-431-887-32 Sequence 32, Appli
30	77	89.5	253	4	US-09-431-887-3 Sequence 3, Appli
31	77	89.5	253	4	US-09-431-887-7 Sequence 7, Appli
32	77	89.5	253	4	US-09-431-887-9 Sequence 9, Appli
33	77	89.5	253	4	US-09-431-887-10 Sequence 10, Appli
34	77	89.5	253	4	US-09-431-887-11 Sequence 11, Appli
35	77	89.5	253	4	US-09-431-887-12 Sequence 12, Appli
36	77	89.5	253	4	US-09-431-887-14 Sequence 14, Appli
37	77	89.5	253	4	US-09-431-887-16 Sequence 16, Appli
38	77	89.5	253	4	US-09-431-887-18 Sequence 18, Appli
39	77	89.5	254	3	US-09-128-450-26 Sequence 26, Appli
40	77	89.5	254	4	US-09-823-494-26 Sequence 26, Appli
41	77	89.5	254	4	US-09-431-887-23 Sequence 23, Appli
42	77	89.5	255	1	US-08-242-188-4 Sequence 4, Appli
43	77	89.5	255	1	US-08-509-261A-4 Sequence 4, Appli
44	77	89.5	255	1	US-08-660-626-10 Sequence 10, Appli
45	77	89.5	255	1	US-08-692-892-4 Sequence 4, Appli

## ALIGNMENTS

RESULT 1  
US-08-242-188-1  
Sequence 1, Application US/08242188  
Patent No. 5565186  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Scott, Michael R.  
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE  
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Karl Bosicovic  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/242,188  
FILING DATE: 13-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Bosicovic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/014001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 854-5277  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-242-188-1  
Query Match 100.0%; Score 86; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 NDWEDRYRENNMR 14

Db 142 NDWEDRYRENMYR 155

## RESULT 2

US-08-509-261A-1  
Sequence 1, Application US/08509261A  
Patent No. 5763244  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Scott, Michael R.  
APPLICANT: Telling, Glenn  
TITLE OF INVENTION: Method of Detecting Prions  
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Bozicevic & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FASTSEQ for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/509,261A  
FILING DATE: 31-JUL-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 6510-030001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650-327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-509-261A-1  
Query Match 100.0%; Score 86; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4,3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14  
Db 142 NDWEDRYRENMYR 155

## RESULT 3

US-08-660-626-7  
Sequence 7, Application US/08660626  
Patent No. 5789655  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Glenn C. Telling  
APPLICANT: Fred E. Cohen  
APPLICANT: Michael R. Scott  
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING  
TITLE OF INVENTION: EPIPOPE-TAGGED PROTEINS  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025

## COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Acciii  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/660,626  
FILING DATE:  
CLASSIFICATION: 435

## ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875

## INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MOdPrP  
US-08-660-626-7

Query Match 100.0%; Score 86; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4,3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14  
Db 142 NDWEDRYRENMYR 155

## RESULT 4

US-08-692-892-1  
Sequence 1, Application US/08692892  
Patent No. 5792901  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Scott, Michael R.  
APPLICANT: Telling, Glenn  
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND  
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAVE  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Karl Bozicevic  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/692,892  
FILING DATE: 30-JULY-1996  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/056001  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-692-892-1

Query Match 100.0%; Score 86; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14  
Db 142 NDWEDRYRENMYR 155

RESULT 5  
US-08-713-939A-1  
Sequence 1, Application US/08713939A  
Patent No. 584553  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/713,939A  
FILING DATE: 13-SEP-1996  
CLASSIFICATION: 436  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-713-939A-1

Query Match 100.0%; Score 86; DB 2; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 NDWEDRYRENMYR 14

Db 142 NDWEDRYRENMYR 155

RESULT 6  
US-08-868-162A-21  
Sequence 21, Application US/08868162A  
Patent No. 596269  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley  
APPLICANT: Cohen, Fred  
APPLICANT: James, Thomas  
APPLICANT: Karako, Kiyotoshi  
TITLE OF INVENTION: Prion Protein Modulator Factor  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Bozicevic & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/868,162A  
FILING DATE: 03-JUN-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 6510-083001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650-327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO: 21:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-868-162A-21

Query Match 100.0%; Score 86; DB 2; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRENMYR 14  
Db 142 NDWEDRYRENMYR 155

RESULT 7  
US-09-031-168-7  
Sequence 7, Application US/09031168  
Patent No. 6150583  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Glenn C. Telling  
APPLICANT: Fred E. Cohen  
APPLICANT: Michael R. Scott  
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Fish & Richardson  
STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/031,168  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/660,626  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Valeta Gregg  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MOPrP  
US-09-031-168-7

Query Match 100.0%; Score 86; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 NDWEDRYRENNYR 14  
DB 142 NDWEDRYRENNYR 155  
RESULT 8  
US-09-128-450-19  
Sequence 19, Application US/09128450  
Patent No. 6211149  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Chabry, Joelle  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
TITLE OF INVENTION: Protein  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/128,450  
CURRENT FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentln Ver. 2.0  
SEQ ID NO 19  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-128-450-19

Query Match 100.0%; Score 86; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNYR 14  
DB 142 NDWEDRYRENNYR 155

RESULT 9  
US-09-128-450-28  
Sequence 28, Application US/09128450  
Patent No. 6211149  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Chabry, Joelle  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
TITLE OF INVENTION: Protein  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/128,450  
CURRENT FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentln Ver. 2.0  
SEQ ID NO 28  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-128-450-28

Query Match 100.0%; Score 86; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENNYR 14  
DB 142 NDWEDRYRENNYR 155

RESULT 10  
US-09-036-579-1  
Sequence 1, Application US/09036579  
Patent No. 6280954  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/036,579  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/713,939  
FILING DATE: 13-SEP-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875



TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-036-579-1

Query Match 100.0%; Score 86; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 142 NDWEDRYRENMYR 155

RESULT 11  
US-09-823-494-19  
Sequence 19, Application US/09823494  
Patent No. 6355610  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/823,494  
CURRENT FILING DATE: 2001-03-30  
PRIOR APPLICATION NUMBER: 09/128,450  
PRIOR FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 19  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-823-494-19

Query Match 100.0%; Score 86; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 142 NDWEDRYRENMYR 155

RESULT 12  
US-09-823-494-28  
Sequence 28, Application US/09823494  
Patent No. 6355610  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Caughey, Byron W  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/823,494  
CURRENT FILING DATE: 2001-03-30  
PRIOR APPLICATION NUMBER: 09/128,450  
PRIOR FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: Patentin Ver. 2.0  
SEQ ID NO 28  
LENGTH: 254  
TYPE: PRT

ORGANISM: Mus musculus  
US-09-823-494-28

Query Match 100.0%; Score 86; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 142 NDWEDRYRENMYR 155

RESULT 13  
US-09-550-374-1  
Sequence 1, Application US/09550374  
Patent No. 6372214  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/550,374  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/036,579  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-09-550-374-1

Query Match 100.0%; Score 86; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 142 NDWEDRYRENMYR 155

RESULT 14  
US-09-431-887-20  
Sequence 20, Application US/09431887  
Patent No. 6534036  
GENERAL INFORMATION:  
APPLICANT: D-Gen Limited

; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE  
 ; FILE REFERENCE: ICOT/P21952  
 ; CURRENT APPLICATION NUMBER: US/09/431,887  
 ; CURRENT FILING DATE: 1999-11-02  
 ; PRIOR APPLICATION NUMBER: GB 9824091.4  
 ; PRIOR FILING DATE: 1999-11-04  
 ; NUMBER OF SEQ ID NOS: 37  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; SEQ ID NO 20  
 ; LENGTH: 254  
 ; TYPE: PRT  
 ; ORGANISM: Mus sp.  
 US-09-431-887-20

Query Match 100.0%; Score 86; DB 4; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNMYR 14  
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 DB 142 NDWEDRYRNNMYR 155

RESULT 15  
 US-09-431-887-21  
 ; Sequence 21, Application US/09431887  
 ; Patent No. 6534036  
 ; GENERAL INFORMATION:  
 ; APPLICANT: D-gen Limited  
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE  
 ; FILE REFERENCE: ICOT/P21952  
 ; CURRENT APPLICATION NUMBER: US/09/431,887  
 ; CURRENT FILING DATE: 1999-11-02  
 ; PRIOR APPLICATION NUMBER: GB 9824091.4  
 ; PRIOR FILING DATE: 1999-11-04  
 ; NUMBER OF SEQ ID NOS: 37  
 ; SOFTWARE: PatentIn Ver. 2.0  
 ; SEQ ID NO 21  
 ; LENGTH: 254  
 ; TYPE: PRT  
 ; ORGANISM: Mus sp.  
 US-09-431-887-21

Query Match 100.0%; Score 86; DB 4; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNMYR 14  
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 DB 142 NDWEDRYRNNMYR 155

Search completed: April 30, 2004, 15:33:04  
 Job time : 13.25 secs

GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 12.25 Seconds  
(without alignments)  
59.001 Million cell updates/sec

Title: US-09-603-832-6  
Perfect score: 71  
Sequence: 1 CWNITIKQVTTTT 14

Scoring table:  
BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0  
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Post-processing: Minimum Match 0%  
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Listing first 45 summaries

Database : Issued Patents AA.\*  
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Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

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1	60.5	85.2	33	1 US-08-244-701B-36	Sequence 36, Appl
2	60.5	85.2	33	4 US-09-076-721-36	Sequence 36, Appl
3	60.5	85.2	142	1 US-08-556-823-2	Sequence 2, Appl
4	60.5	85.2	142	1 US-08-556-823-10	Sequence 10, Appl
5	60.5	85.2	208	3 US-09-128-450-18	Sequence 18, Appl
6	60.5	85.2	208	4 US-09-823-494-18	Sequence 18, Appl
7	60.5	85.2	245	4 US-09-431-887-5	Sequence 5, Appl
8	60.5	85.2	245	4 US-09-431-887-15	Sequence 15, Appl
9	60.5	85.2	252	4 US-09-431-887-13	Sequence 13, Appl
10	60.5	85.2	252	4 US-09-431-887-17	Sequence 17, Appl
11	60.5	85.2	253	1 US-08-242-188-2	Sequence 2, Appl
12	60.5	85.2	253	1 US-08-509-261A-2	Sequence 2, Appl
13	60.5	85.2	253	1 US-08-660-626-8	Sequence 8, Appl
14	60.5	85.2	253	1 US-08-662-882-2	Sequence 2, Appl
15	60.5	85.2	253	2 US-08-713-939A-2	Sequence 2, Appl
16	60.5	85.2	253	2 US-08-868-162A-22	Sequence 22, Appl
17	60.5	85.2	253	3 US-09-031-168-8	Sequence 8, Appl
18	60.5	85.2	253	3 US-09-128-450-20	Sequence 20, Appl
19	60.5	85.2	253	3 US-09-036-579-2	Sequence 2, Appl
20	60.5	85.2	253	4 US-09-823-494-20	Sequence 20, Appl
21	60.5	85.2	253	4 US-09-550-374-2	Sequence 2, Appl
22	60.5	85.2	253	4 US-09-431-887-1	Sequence 1, Appl
23	60.5	85.2	253	4 US-09-431-887-2	Sequence 2, Appl
24	60.5	85.2	253	4 US-09-431-887-3	Sequence 3, Appl
25	60.5	85.2	253	4 US-09-431-887-4	Sequence 4, Appl
26	60.5	85.2	253	4 US-09-431-887-7	Sequence 7, Appl
27	60.5	85.2	253	4 US-09-431-887-8	Sequence 8, Appl

28	60.5	85.2	253	4 US-09-431-887-9	Sequence 9, Appl
29	60.5	85.2	253	4 US-09-431-887-10	Sequence 10, Appl
30	60.5	85.2	253	4 US-09-431-887-11	Sequence 11, Appl
31	60.5	85.2	253	4 US-09-431-887-12	Sequence 12, Appl
32	60.5	85.2	253	4 US-09-431-887-14	Sequence 14, Appl
33	60.5	85.2	253	4 US-09-431-887-16	Sequence 16, Appl
34	60.5	85.2	253	4 US-09-431-887-18	Sequence 18, Appl
35	60.5	85.2	253	4 US-09-431-887-19	Sequence 19, Appl
36	60.5	85.2	253	4 US-09-943-906-2	Sequence 2, Appl
37	60.5	85.2	253	4 US-09-669-516C-8	Sequence 8, Appl
38	60.5	85.2	253	4 US-09-919-172-57	Sequence 57, Appl
39	60.5	85.2	253	4 US-09-976-594-72	Sequence 72, Appl
40	60.5	85.2	254	1 US-08-242-168-1	Sequence 1, Appl
41	60.5	85.2	254	1 US-08-509-261A-1	Sequence 1, Appl
42	60.5	85.2	254	1 US-08-660-626-7	Sequence 7, Appl
43	60.5	85.2	254	1 US-08-692-892-1	Sequence 1, Appl
44	60.5	85.2	254	2 US-08-713-939A-1	Sequence 1, Appl
45	60.5	85.2	254	2 US-08-868-162A-21	Sequence 21, Appl

## ALIGNMENTS

RESULT 1  
US-08-244-701B-36  
Sequence 36, Application US/08244701B  
Patent No. 5773572  
GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.  
APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.  
TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds  
STREET: 1155 Avenue of the Americas  
CITY: New York  
STATE: New York  
COUNTRY: U.S.A.  
ZIP: 10036  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/244,701B  
FILING DATE: 02-JUN-1994  
CLASSIFICATION: 436  
ATTORNEY/AGENT INFORMATION:  
NAME: Panucci, Allan A.  
REGISTRATION NUMBER: 30,256  
REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090  
TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNIE  
INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 33 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 1  
OTHER INFORMATION: /label=X  
OTHER INFORMATION: of y may be absent or present independently  
OTHER INFORMATION: of y denotes one or amino acid(s)  
FEATURE:  
NAME/KEY: Modified-site  
LOCATION: 33

OTHER INFORMATION: /label=Y  
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US-08-244-701B-36

Query Match 85.2%; Score 60.5; DB 1; Length 33;  
Best Local Similarity 93.3%; Pred. No. 0.00056;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 7 CWNITIKQHTVTTTT 21

RESULT 2  
US-09-076-721-36

Sequence 36, Application US/09076721  
Patent No. 6379905

GENERAL INFORMATION:  
APPLICANT: Fishleigh, Robert V.

APPLICANT: Robson, Barry  
APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins  
NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas  
CITY: New York

STATE: New York  
COUNTRY: U.S.A.

ZIP: 10036

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/076,721

FILING DATE:  
CLASSIFICATION:

PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/244,701

FILING DATE:  
ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.  
REGISTRATION NUMBER: 30,256

REFERENCE/DOCKET NUMBER: 8080-007  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (212) 790-9090

TELEFAX: (212) 869-8864/9741  
TELEX: 66141 PENNTE

INFORMATION FOR SEQ ID NO: 36:  
SEQUENCE CHARACTERISTICS:

LENGTH: 33 amino acids  
TYPE: amino acid

STRANDEDNESS: single  
TOPOLOGY: linear

MOLECULE TYPE: peptide  
FEATURE:

NAME/KEY: Modified-site  
LOCATION: 1

OTHER INFORMATION: /label=X  
OTHER INFORMATION: /note="X may be absent or present independently

OTHER INFORMATION: of Y and denotes one or amino acid(s)"  
FEATURE:

NAME/KEY: Modified-site  
LOCATION: 33

OTHER INFORMATION: /label=Y  
OTHER INFORMATION: /note="Y may be absent or present independently

OTHER INFORMATION: of X and denotes one or more amino acid(s)"  
US-09-076-721-36

Query Match 85.2%; Score 60.5; DB 4; Length 33;

Best Local Similarity 93.3%; Pred. No. 0.00056;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 7 CWNITIKQHTVTTTT 21

RESULT 3  
US-08-556-823-2

Sequence 2, Application US/08556823  
Patent No. 5750361

GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko  
APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein  
NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park

STATE: California  
COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Ascii  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556,823  
FILING DATE:

CLASSIFICATION: 530  
ATTORNEY/AGENT INFORMATION:

NAME: Valeta Greg  
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids  
TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: peptide

US-08-556-823-2

Query Match 85.2%; Score 60.5; DB 1; Length 142;  
Best Local Similarity 93.3%; Pred. No. 0.0029;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 90 CWNITIKQHTVTTTT 104

RESULT 4  
US-08-556-823-10  
Sequence 10, Application US/08556823  
Patent No. 5750361

GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko  
APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein  
NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

```

; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: AsciiI
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeria Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

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Query Match      85.2%; Score 60.5; DB 1; Length 142;
Best Local Similarity 93.3%; Pred. No. 0.0029;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
Db      90 CWNITIKQHTVTTT 104

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RESULT 5
; US-09-128-450-18
; Sequence 18, Application US/09128450
; Patent No. 6211149
; GENERAL INFORMATION:
; APPLICANT: Chesebrough, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/128,450
; CURRENT FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 18
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Hamster sp.
; FEATURE:
; NAME/KEY: NON TER
; LOCATION: (1)..(2)
; US-09-128-450-18

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Query Match      85.2%; Score 60.5; DB 3; Length 208;
Best Local Similarity 93.3%; Pred. No. 0.0045;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
Db      156 CWNITIKQHTVTTT 170

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RESULT 6
US-09-823-494-18

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; Sequence 18, Application US/093823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebrough, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 18
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Hamster sp.
; FEATURE:
; NAME/KEY: NON_TER
; LOCATION: (1)..(2)
; US-09-823-494-18

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Query Match      85.2%; Score 60.5; DB 4; Length 208;
Best Local Similarity 93.3%; Pred. No. 0.0045;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
Db      156 CWNITIKQHTVTTT 170

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RESULT 7
; US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
; US-09-431-887-5

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Query Match      85.2%; Score 60.5; DB 4; Length 245;
Best Local Similarity 93.3%; Pred. No. 0.0054;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
Db      171 CWNITIKQHTVTTT 185

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RESULT 8
; US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952

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; CURRENT APPLICATION NUMBER: US/09/431,887  
 ; CURRENT FILING DATE: 1999-11-02  
 ; PRIOR APPLICATION NUMBER: GB 9824091.4  
 ; PRIOR FILING DATE: 1999-11-04  
 ; NUMBER OF SEQ ID NOS: 37  
 ; SOFTWARE: Patent In Ver. 2.0  
 ; SEQ ID NO 15  
 ; LENGTH: 245  
 ; TYPE: PRT  
 ; ORGANISM: Cercopithecus diana  
 ; US-09-431-887-15

Query Match 85.2%; Score 60.5; DB 4; Length 245;  
 Best Local Similarity 93.3%; Pred. No. 0.0054;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 Db 171 CWNITIKQHTVTTTT 185

RESULT 9  
 ; US-09-431-887-13  
 ; Sequence 13, Application US/09431887  
 ; Patent No. 6534036  
 ; GENERAL INFORMATION:  
 ; APPLICANT: D-Gen Limited  
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE  
 ; FILE REFERENCE: ICOT/P21952  
 ; CURRENT APPLICATION NUMBER: US/09/431,887  
 ; CURRENT FILING DATE: 1999-11-02  
 ; PRIOR APPLICATION NUMBER: GB 9824091.4  
 ; PRIOR FILING DATE: 1999-11-04  
 ; NUMBER OF SEQ ID NOS: 37  
 ; SOFTWARE: Patent In Ver. 2.0  
 ; SEQ ID NO 13  
 ; LENGTH: 252  
 ; TYPE: PRT  
 ; ORGANISM: Callithrix sp.  
 ; US-09-431-887-13

Query Match 85.2%; Score 60.5; DB 4; Length 252;  
 Best Local Similarity 93.3%; Pred. No. 0.0055;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 Db 178 CWNITIKQHTVTTTT 192

RESULT 10  
 ; US-09-431-887-17  
 ; Sequence 17, Application US/09431887  
 ; Patent No. 6534036  
 ; GENERAL INFORMATION:  
 ; APPLICANT: D-Gen Limited  
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE  
 ; FILE REFERENCE: ICOT/P21952  
 ; CURRENT APPLICATION NUMBER: US/09/431,887  
 ; CURRENT FILING DATE: 1999-11-02  
 ; PRIOR APPLICATION NUMBER: GB 9824091.4  
 ; PRIOR FILING DATE: 1999-11-04  
 ; NUMBER OF SEQ ID NOS: 37  
 ; SOFTWARE: Patent In Ver. 2.0  
 ; SEQ ID NO 17  
 ; LENGTH: 252  
 ; TYPE: PRT  
 ; ORGANISM: Cebus sp.  
 ; US-09-431-887-17

Query Match 85.2%; Score 60.5; DB 4; Length 252;

Best Local Similarity 93.3%; Pred. No. 0.0055;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 Db 178 CWNITIKQHTVTTTT 192

RESULT 11  
 ; US-08-242-188-2  
 ; Sequence 2, Application US/08242188  
 ; Patent No. 5565186  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Prusiner, Stanley B.  
 ; APPLICANT: Scott, Michael R.  
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE  
 ; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME  
 ; NUMBER OF SEQUENCES: 4  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Karl Bosicovic  
 ; STREET: 2200 Sand Hill Road  
 ; CITY: Menlo Park  
 ; STATE: CA  
 ; COUNTRY: USA  
 ; ZIP: 94025  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent In Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/242,188  
 ; FILING DATE: 13-MAY-1994  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Bosicovic, Karl  
 ; REGISTRATION NUMBER: 28,807  
 ; REFERENCE/DOCKET NUMBER: 06510/014001  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 854-5277  
 ; TELEFAX: (415) 854-0875  
 ; INFORMATION FOR SEQ ID NO: 2:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 253 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS: single  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: peptide  
 ; ORIGINAL SOURCE:  
 ; ORGANISM: HUMAN PRION PROTEIN, HuPrP  
 ; US-08-242-188-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;  
 Best Local Similarity 93.3%; Pred. No. 0.0056;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 Db 179 CWNITIKQHTVTTTT 193

RESULT 12  
 ; US-08-509-261A-2  
 ; Sequence 2, Application US/08509261A  
 ; Patent No. 5763244  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Prusiner, Stanley B.  
 ; APPLICANT: Scott, Michael R.  
 ; APPLICANT: Telling, Glenn  
 ; TITLE OF INVENTION: Method of Detecting Prions  
 ; TITLE OF INVENTION: in a Sample and Transgenic Animal Used fore  
 ; NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:  
ADDRESSEE: Bozicevic & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/509,261A  
FILING DATE: 31-JUL-1995  
CLASSIFICATION: 800  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 6510-030001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650-327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
US-08-509-261A-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;  
Best Local Similarity 93.3%; Pred. No. 0.0056;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14  
DB 179 CWNITIKQHTVTTT 193

RESULT 13  
US-08-660-626-8  
Sequence 8, Application US/08660626  
Patent No. 578965  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Glenn C. Telling  
APPLICANT: Fred E. Cohen  
APPLICANT: Michael R. Scott  
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING  
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Asciti  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/660,626  
FILING DATE:  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:

NAME: Valecia Gregg  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 8:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN PRION PROTEIN, HuPrP  
US-08-660-626-8

Query Match 85.2%; Score 60.5; DB 1; Length 253;  
Best Local Similarity 93.3%; Pred. No. 0.0056;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14  
DB 179 CWNITIKQHTVTTT 193

RESULT 14  
US-08-692-892-2  
Sequence 2, Application US/08692892  
Patent No. 5792901  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Telling, Glenn  
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND  
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Karl Bozicevic  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/692,892  
FILING DATE: 30-JULY-1996  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/056001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 253 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: HUMAN PRION PROTEIN, HuPrP  
US-08-692-892-2

Query Match 85.2%; Score 60.5; DB 1; Length 253;  
Best Local Similarity 93.3%; Pred. No. 0.0056;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
QY 1 CWNITIKQ-TVTTT 14  
Db 179 CWNITIKQHTVTTT 193

## RESULT 15

US-08-713-939A-2  
; Sequence 2, Application US/08713939A  
; Patent No. 584653  
; GENERAL INFORMATION:  
; APPLICANT: Prusiner, Stanley B.  
; APPLICANT: Williamson, R. Anthony  
; APPLICANT: Burton, Dennis R.  
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
; NUMBER OF SEQUENCES: 86  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Fish & Richardson P.C.  
; STREET: 2200 Sand Hill Road  
; CITY: Menlo Park  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FastSeq Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/713,939A  
; FILING DATE: 13-SEP-1996  
; CLASSIFICATION: 436  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER:  
; ATTORNEY/AGENT INFORMATION:  
; FILING DATE:  
; NAME: Bozicevic, Karl  
; REGISTRATION NUMBER: 28,807  
; REFERENCE/DOCKET NUMBER: 06510/059001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-854-5277  
; TELEFAX: 415-854-0875  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 253 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-08-713-939A-2

Query Match 85.2%; Score 60.5; DB 2; Length 253;  
Best Local Similarity 93.3%; Pred. NO. 0.0056;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14  
Db 179 CWNITIKQHTVTTT 193

Search completed: April 30, 2004, 15:33:04  
Job time: 12.25 secs



GenCore version 5.1.6  
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# OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:19 ; Search time 17.5 Seconds  
(without alignments)  
59.001 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103

Sequence: 1 ETDVKMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Issued\_Patents\_AA.\*  
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2: /cgn2\_6/ptodata/2/1aa/5B\_COMB.pep.\*  
3: /cgn2\_6/ptodata/2/1aa/6A\_COMB.pep.\*  
4: /cgn2\_6/ptodata/2/1aa/6B\_COMB.pep.\*  
5: /cgn2\_6/ptodata/2/1aa/PCTUS\_COMB.pep.\*  
6: /cgn2\_6/ptodata/2/1aa/backfile1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	254	1 US-08-242-188-1	Sequence 1, Appli
2	103	100.0	254	1 US-08-509-261A-1	Sequence 1, Appli
3	103	100.0	254	1 US-08-660-626-7	Sequence 1, Appli
4	103	100.0	254	1 US-08-692-852-1	Sequence 1, Appli
5	103	100.0	254	2 US-08-713-939A-1	Sequence 21, Appli
6	103	100.0	254	3 US-08-868-162A-21	Sequence 7, Appli
7	103	100.0	254	3 US-09-031-168-7	Sequence 19, Appli
8	103	100.0	254	3 US-09-128-450-19	Sequence 28, Appli
9	103	100.0	254	3 US-09-128-450-28	Sequence 1, Appli
10	103	100.0	254	3 US-09-036-579-1	Sequence 19, Appli
11	103	100.0	254	4 US-09-823-494-19	Sequence 28, Appli
12	103	100.0	254	4 US-09-823-494-28	Sequence 1, Appli
13	103	100.0	254	4 US-09-550-374-1	Sequence 20, Appli
14	103	100.0	254	4 US-09-431-887-20	Sequence 22, Appli
15	103	100.0	254	4 US-09-431-887-22	Sequence 23, Appli
16	103	100.0	254	4 US-09-431-887-23	Sequence 2, Appli
17	103	100.0	254	4 US-09-431-887-25	Sequence 1, Appli
18	103	100.0	254	4 US-09-627-218B-10	Sequence 10, Appli
19	103	100.0	254	4 US-09-943-906-1	Sequence 3, Appli
20	103	100.0	254	4 US-09-669-516C-7	Sequence 7, Appli
21	103	100.0	254	1 US-08-242-188-3	Sequence 3, Appli
22	102	99.0	263	1 US-08-509-261A-3	Sequence 3, Appli
23	102	99.0	263	1 US-08-660-626-9	Sequence 3, Appli
24	102	99.0	263	1 US-08-692-852-3	Sequence 3, Appli
25	102	99.0	263	2 US-08-713-939A-3	Sequence 23, Appli
26	102	99.0	263	2 US-08-868-162A-23	Sequence 9, Appli
27	102	99.0	263	3 US-09-031-168-9	Sequence 9, Appli

28	102	99.0	263	3 US-09-036-579-3	Sequence 3, Appli
29	102	99.0	263	4 US-09-550-374-3	Sequence 3, Appli
30	102	99.0	263	4 US-09-943-906-3	Sequence 3, Appli
31	102	99.0	263	4 US-09-669-516C-9	Sequence 26, Appli
32	101	98.1	256	4 US-09-431-887-26	Sequence 21, Appli
33	101	98.1	264	3 US-09-128-450-21	Sequence 21, Appli
34	101	98.1	264	4 US-09-823-494-21	Sequence 2, Appli
35	101	98.1	264	4 US-09-431-887-24	Sequence 27, Appli
36	101	98.1	264	4 US-09-431-887-27	Sequence 24, Appli
37	101	98.1	264	4 US-09-627-218B-11	Sequence 11, Appli
38	99	96.1	142	1 US-08-556-823-10	Sequence 10, Appli
39	99	96.1	245	4 US-09-431-887-5	Sequence 5, Appli
40	99	96.1	245	4 US-09-431-887-15	Sequence 15, Appli
41	99	96.1	252	4 US-09-431-887-13	Sequence 17, Appli
42	99	96.1	252	4 US-09-431-887-17	Sequence 17, Appli
43	99	96.1	253	1 US-08-242-188-2	Sequence 2, Appli
44	99	96.1	253	1 US-08-509-261A-2	Sequence 2, Appli
45	99	96.1	253	1 US-08-660-626-8	Sequence 8, Appli

## ALIGNMENTS

RESULT 1  
US-08-242-188-1  
Sequence 1, Application US/08242188  
Patent No. 556186  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Scott, Michael R.  
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE  
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME  
NUMBER OF SEQUENCES: 4  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Karl Bosicovic  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/242,188  
FILING DATE: 13-MAY-1994  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Bosicovic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/014001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 854-5277  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-242-188-1  
Query Match 100.0%; Score 103; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8.4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ETDVKMERVVEQMCVTQYQ 20

Db 199 ETDVKMERVVEQMCVTQY 218

## RESULT 2

US-08-509-261A-1

Sequence 1, Application US/08509261A

Patent No. 5763244

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn

TITLE OF INVENTION: Method of Detecting Prions

TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Bozicevic & Reed, LLP

STREET: 285 Hamilton Avenue, Suite 200

CITY: Palo Alto

STATE: CA

COUNTRY: USA

ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq for Windows Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/509,261A

FILING DATE: 31-JUL-1995

CLASSIFICATION: 800

PRIOR APPLICATION NUMBER:

ATTORNEY/AGENT INFORMATION:

FILING DATE:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 29,807

REFERENCE/DOCKET NUMBER: 6510-030001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 650-327-3400

TELEFAX: 650-327-3231

TELEX:

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

US-08-509-261A-1

Query Match 100.0%; Score 103; DB 1; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.4e-10;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQY 20

Db 199 ETDVKMERVVEQMCVTQY 218

## RESULT 3

US-08-660-626-7

Sequence 7, Application US/08660626

Patent No. 5789655

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Glenn C. Telling

APPLICANT: Fred B. Cohen

APPLICANT: Michael R. Scott

TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Asclit

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/660,626

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 7:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

ORIGINAL SOURCE:

ORGANISM: MOUSE PRION PROTEIN, MoPrP

US-08-660-626-7

Query Match 100.0%; Score 103; DB 1; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.4e-10;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQY 20

Db 199 ETDVKMERVVEQMCVTQY 218

## RESULT 4

US-08-692-892-1

Sequence 1, Application US/08692892

Patent No. 5792901

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.

APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn

TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND

TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME

NUMBER OF SEQUENCES: 4

CORRESPONDENCE ADDRESS:

ADDRESSEE: Karl Bozicevic

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/692,892

FILING DATE: 30-JULY-1996

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/056001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-692-892-1

Query Match 100.0%; Score 103; DB 1; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||||  
DB 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 5  
US-08-713-939A-1  
Sequence 1, Application US/08713939A  
Patent No. 5846533 ✓  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/713,939A  
FILING DATE: 13-SEP-1996  
CLASSIFICATION: 436  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX:  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-713-939A-1

Query Match 100.0%; Score 103; DB 2; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20

DB 199 ETDVQMERVVEQMCVTQYQ 218  
|||||

RESULT 6  
US-08-868-162A-21  
Sequence 21, Application US/08868162A  
Patent No. 5962669  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley  
APPLICANT: Cohen, Fred  
APPLICANT: James, Thomas  
APPLICANT: Kaneko, Kiyotoshi  
TITLE OF INVENTION: Prion Protein Modulator Factor  
NUMBER OF SEQUENCES: 24  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Bozicevic & Reed, LLP  
STREET: 285 Hamilton Avenue, Suite 200  
CITY: Palo Alto  
STATE: CA  
COUNTRY: USA  
ZIP: 94301  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq for Windows Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/868,162A  
FILING DATE: 03-JUN-1997  
CLASSIFICATION: 536  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER:  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 6510-083001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 650-327-3400  
TELEFAX: 650-327-3231  
TELEX:  
INFORMATION FOR SEQ ID NO: 21:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MoPrP  
US-08-868-162A-21

Query Match 100.0%; Score 103; DB 2; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||||  
DB 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 7  
US-09-031-168-7  
Sequence 7, Application US/09031168  
Patent No. 6150583  
GENERAL INFORMATION:  
APPLICANT: Stanley B. Prusiner  
APPLICANT: Glenn C. Telling  
APPLICANT: Fred E. Cohen  
APPLICANT: Michael R. Scott  
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING

TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS  
NUMBER OF SEQUENCES: 13  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson  
STREET: 2200 Sand Hill Road, Suite 100  
CITY: Menlo Park  
STATE: California  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: ASCII  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/031,168  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/660,625  
FILING DATE:  
ATTORNEY/AGENT INFORMATION:  
NAME: Valeta Gregg  
REGISTRATION NUMBER: 35,127  
REFERENCE/DOCKET NUMBER: 07532/003001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 322-5070  
TELEFAX: (415) 854-0875  
INFORMATION FOR SEQ ID NO: 7:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
ORIGINAL SOURCE:  
ORGANISM: MOUSE PRION PROTEIN, MOPrP  
US-09-031-168-7

Query Match 100.0%; Score 103; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
DB 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 8  
US-09-128-450-19  
Sequence 19, Application US/09128450  
Patent No. 6211149  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Chabry, Byron W  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/128,450  
CURRENT FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 19  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-128-450-19

Query Match 100.0%; Score 103; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
DB 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 9  
US-09-128-450-28  
Sequence 28, Application US/09128450  
Patent No. 6211149  
GENERAL INFORMATION:  
APPLICANT: Chesebro, Bruce W  
APPLICANT: Chabry, Byron W  
APPLICANT: Priola, Susette  
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
FILE REFERENCE: 50121  
CURRENT APPLICATION NUMBER: US/09/128,450  
CURRENT FILING DATE: 1998-08-03  
NUMBER OF SEQ ID NOS: 29  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 28  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-09-128-450-28

Query Match 100.0%; Score 103; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
DB 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 10  
US-09-036-579-1  
Sequence 1, Application US/09036579  
Patent No. 6280954  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/036,579  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/713,939  
FILING DATE: 13-SEP-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875

TELEX:  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 254 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-09-036-579-1

Query Match 100.0%; Score 103; DB 3; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 11  
US-09-823-494-19  
; Sequence 19, Application US/09823494  
; Patent No. 6355610  
; GENERAL INFORMATION:  
; APPLICANT: Chesebro, Bruce W  
; APPLICANT: Chabry, Joelle  
; APPLICANT: Priola, Susette  
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
; FILE REFERENCE: 50121  
; CURRENT APPLICATION NUMBER: US/09/823,494  
; PRIOR FILING DATE: 2001-03-30  
; PRIOR APPLICATION NUMBER: 09/128,450  
; PRIOR FILING DATE: 1998-08-03  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 19  
; LENGTH: 254  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-09-823-494-19

Query Match 100.0%; Score 103; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 12  
US-09-823-494-28  
; Sequence 28, Application US/09823494  
; Patent No. 6355610  
; GENERAL INFORMATION:  
; APPLICANT: Chesebro, Bruce W  
; APPLICANT: Chabry, Byron W  
; APPLICANT: Chabry, Joelle  
; APPLICANT: Priola, Susette  
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion  
; FILE REFERENCE: 50121  
; CURRENT APPLICATION NUMBER: US/09/823,494  
; PRIOR FILING DATE: 2001-03-30  
; PRIOR APPLICATION NUMBER: 09/128,450  
; PRIOR FILING DATE: 1998-08-03  
; NUMBER OF SEQ ID NOS: 29  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 28  
; LENGTH: 254  
; TYPE: PRT

; ORGANISM: Mus musculus  
US-09-823-494-28

Query Match 100.0%; Score 103; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 13  
US-09-550-374-1  
; Sequence 1, Application US/09550374  
; Patent No. 6372214  
; GENERAL INFORMATION:  
; APPLICANT: Prusiner, Stanley B.  
; APPLICANT: Williamson, R. Anthony  
; APPLICANT: Burton, Dennis R.  
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
; NUMBER OF SEQUENCES: 86  
; CORRESPONDENCE ADDRESS:  
; ADDRESSER: Fish & Richardson P.C.  
; STREET: 2200 Sand Hill Road  
; CITY: Menlo Park  
; STATE: CA  
; COUNTRY: U.S.A.  
; ZIP: 94025  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Diskette  
; COMPUTER: IBM Compatible  
; OPERATING SYSTEM: DOS  
; SOFTWARE: FASTSEQ Version 2.0  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/550,374  
; FILING DATE:  
; CLASSIFICATION:  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: 09/036,579  
; FILING DATE:  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Bozicevic, Karl  
; REGISTRATION NUMBER: 28,807  
; REFERENCE/DOCKET NUMBER: 06510/059001  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 415-854-5277  
; TELEFAX: 415-854-0875  
; TELEX:  
; INFORMATION FOR SEQ ID NO: 1:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 254 amino acids  
; TYPE: amino acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: peptide  
US-09-550-374-1

Query Match 100.0%; Score 103; DB 4; Length 254;  
Best Local Similarity 100.0%; Pred. No. 8,4e-10;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 14  
US-09-431-887-20  
; Sequence 20, Application US/09431887  
; Patent No. 6534036  
; GENERAL INFORMATION:  
; APPLICANT: D-Gen Limited

```

; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-431-887-20

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```

Query Match          100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 ETDVMMERVVEMQMCVTQYQ 20
      ||||||||||||||||||||
DB      199 ETDVMMERVVEMQMCVTQYQ 218

```

```

RESULT 15
US-09-431-887-21
; Sequence 21, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 21
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus sp.
US-09-431-887-21

```

```

Query Match          100.0%; Score 103; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.4e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 ETDVMMERVVEMQMCVTQYQ 20
      ||||||||||||||||||||
DB      199 ETDVMMERVVEMQMCVTQYQ 218

```

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Search completed: April 30, 2004, 15:33:04
Job time : 17.5 secs

```

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

CM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 60 Seconds  
(without alignments)  
94.183 Million cell updates/sec

Title: US-09-603-832-7  
Perfect score: 103  
Sequence: 1 ETDVKMERVEMQCTQYQ 20

Scoring table: BLOSUM62  
Gap 10.0, Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : A\_Geneseq\_29Jan04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	103	100.0	20	4	AAB66615 Mouse prl
2	103	100.0	124	5	ABG94340 Mouse mpr
3	103	100.0	124	5	ABG80652 Mouse trl
4	103	100.0	124	7	ADD24200 mPrPt-EK
5	103	100.0	208	3	AAB07316 Mouse prl
6	103	100.0	208	5	AAB07327 Mouse prl
7	103	100.0	208	5	ABG31904 Chimera-t
8	103	100.0	209	5	ABG31905 HCV type
9	103	100.0	211	4	AAB30801 Amino aci
10	103	100.0	225	6	ABR42793 Rat prion
11	103	100.0	226	7	ADB85240 Rat prion
12	103	100.0	254	2	AAR86714 Mouse prl
13	103	100.0	254	2	AAM69659 Mouse prl
14	103	100.0	254	2	AAM85900 Mouse prl
15	103	100.0	254	2	AAY07996 Murine pr
16	103	100.0	254	4	AAB72360 Hamster p
17	103	100.0	254	4	AAB61772 Mouse prl
18	103	100.0	254	4	AAB82118 Murine pr
19	103	100.0	254	4	AAB82111 Murine pr
20	103	100.0	254	4	AAB84522 Amino aci
21	103	100.0	254	4	AAG65852 Mouse prl
22	103	100.0	254	5	AAM50888 Mouse prl
23	103	100.0	254	5	ABP51786 Mouse prl
24	103	100.0	254	5	ABG31906 Mouse prl
25	103	100.0	254	5	ABB04427 Murine pr

25	103	100.0	254	5	AAB15602
27	103	100.0	254	5	AAB15609
28	103	100.0	254	6	ABU58867
29	103	100.0	254	6	ABU58867
30	103	100.0	254	6	ABR42792
31	103	100.0	254	7	ADC59531
32	103	100.0	254	7	ADC52088
33	103	100.0	254	7	ADD24194
34	103	100.0	254	7	ADP56264
35	103	100.0	254	7	ADP56737
36	103	100.0	254	7	ADP56736
37	103	100.0	254	7	ADP56739
38	103	100.0	254	7	ADP56740
39	103	100.0	255	4	ABP72357
40	103	100.0	255	4	ABP72358
41	103	100.0	255	4	ABP72359
42	103	100.0	255	5	ABG31903
43	103	100.0	350	5	ABG94339
44	103	100.0	350	5	ABG80651
45	103	100.0	350	7	ADD24199

## ALIGNMENTS

RESULT 1	
AAB66615	
ID AAB66615	standard; peptide; 20 AA.
XX	
AC AAB66615;	
DT 05-APR-2001 (first entry)	
XX	
DE Mouse prion helix 3 peptide.	
XX	
KW Coiled-coil; prion; helix.	
XX	
OS Mus sp.	
XX	
PN MO200100010-A1.	
XX	
PD 04-JUN-2001.	
XX	
PF 23-JUN-2000; 2000WO-CA000736.	
XX	
PR 25-JUN-1999; 99US-0141203P.	
XX	
PA (KOND/) KONDEJEWSKI L H.	
PA (IRV/) IRVIN R T.	
PA (HOD/) HODGES R S.	
PI Kondejewski LH, Irvin RT, Hodges RS;	
XX	
DR WPI; 2001-137855/14.	
XX	
PT Coiled-coil polypeptide compositions useful for generating antibodies	
PT against a specific epitope, comprises a specific epitope from alpha-	
PT helical surface region of a protein inserted into coiled-coil polypeptide	
PT template.	
XX	
PS Disclosure; Fig 4; 25pp; English.	
XX	
CC The present invention relates to a coiled-coil polypeptide with a selected	
CC epitope from solvent accessible region of a protein inserted into a	
CC coiled-coil polypeptide template. The coiled-coil polypeptides are useful	
CC for generating antibodies specific to a selected epitope from a selected	
CC protein and also for identifying ligands that selectively bind the alpha-	
CC helical segment contained in the native protein. The conformation-	
CC specific antibodies are useful as therapeutic and diagnostic ligands	
XX	
SQ Sequence 20 AA;	
Query Match	100.0%; Score 103; DB 4; Length 20;

Pos 12-15





CC attachment site is selected from: (i) an attachment site not naturally  
 CC occurring with the antigen or antigenic determinant; and (ii) an  
 CC attachment site naturally occurring with the antigen or antigenic  
 CC determinant, where the second attachment site is capable of association  
 CC through at least one non-peptide bond to the first attachment site; and  
 CC where the antigen or antigenic determinant and the scaffold interact  
 CC through the association to form an ordered and repetitive antigen array.  
 CC Also included is a process for producing a non-naturally occurring  
 CC ordered and repetitive antigen array. The composition is used in  
 CC immunisation and as a vaccine for diseases such as influenza, graft  
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult  
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,  
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Graves' disease,  
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia  
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,  
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,  
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,  
 CC osteoporosis and infectious diseases. The present sequence is a modified  
 CC antigen for use in the array of the invention. The antigen is modified to  
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-  
 CC containing N- or C-terminal linker peptide which serves as the attachment  
 CC point to a virus like particle or bacterial protein (the scaffold  
 CC protein)

XX Sequence 124 AA;

Query Match 100.0%; Score 103; DB 5; Length 124;  
 Best Local Similarity 100.0%; Pred. No. 3.9e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20  
 |||||  
 Db 80 ETDVKMERVVEQMCVTQYQ 99

RESULT 4  
 ADD24200 standard; protein; 124 AA.

XX ADD24200;

DT 15-JAN-2004 (first entry)

XX mPrPt-EK-Fc\* cleaved protein sequence.

XX vaccine composition: virus-like particle; core particle;

KW first attachment site; antigen; antigenic determinant; prion protein;

KW PrP, PrP peptide, vaccine; neuroprotective; antiinflammatory;

KW prion disease; Bovine Spongiform Encephalopathy; BSE;

KW Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc\*.

XX Unidentified.

OS prion.

XX WO2003059386-A2.

XX 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP00460.

XX 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-1B000166.

XX 08-JUL-2002; 2002US-0393725P.

XX 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;

XX WPI; 2003-598483/56.

A vaccine composition for preventing or treating prion diseases (e.g. Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

PT phage) and at least one prion protein or peptide bound to the virus-like  
 PT particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

XX This invention relates to a novel vaccine composition comprising a virus-  
 CC like or a core particle with at least one first attachment site and at  
 CC least one antigen or antigenic determinant that is a prion protein (PrP)  
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant  
 CC being bound to the virus-like or core particle. The vaccine of the  
 CC invention may have neuroprotective or antiinflammatory activity. The  
 CC composition is useful as a medicament or in manufacturing a medicament  
 CC for the treatment or prevention of prion diseases. The prion diseases may  
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
 CC Disease. The present sequence is the amino acid sequence of the cleaved  
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc\*)  
 CC which was used during the exemplification of the invention.

XX Sequence 124 AA;

Query Match 100.0%; Score 103; DB 7; Length 124;  
 Best Local Similarity 100.0%; Pred. No. 3.9e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVKMERVVEQMCVTQYQ 20  
 |||||  
 Db 80 ETDVKMERVVEQMCVTQYQ 99

RESULT 5  
 AAB07316 standard; protein; 208 AA.

XX AAB07316;

DT 17-OCT-2000 (first entry)

XX Mouse prion protein sequence.

KW Mouse; prion protein; transmissible spongiform encephalopathy;

KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Mus sp.

XX Key

XX Region

XX Disulfide-bond

XX Modified-site

XX /note= "C-terminal phospho-inositol glycolipid membrane

XX anchor (-GPI)"

XX MO200029850-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99WO-FI000897.

XX 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

XX (BSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of

XX transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 41-42; 50pp; English.

CC The present sequence is the mouse prion protein (Prp) sequence.  
 CC Conversion of the normal cellular form of Prp into an aggregated,  
 CC insoluble isoform is implicated in the pathogenesis of Transmissible  
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine  
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)  
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of  
 CC this protein in body fluid or tissue samples may be measured by an assay  
 CC of the present invention, in which a Prp epitope is captured by an  
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp  
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core  
 CC of Prp that is occluded when the Prp is in an aggregated state  
 XX  
 SQ Sequence 208 AA;  
 Query Match 100.0%; Score 103; DB 3; Length 208;  
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 177 ETDVQMERVVEQMCVTQYQ 196  
 RESULT 6  
 AAB07327  
 ID AAB07327 standard; protein, 208 AA.  
 AC AAB07327;  
 XX  
 XX AAB07327;  
 DT 17-OCT-2000 (first entry)  
 XX  
 DE Mouse prion protein sequence.  
 XX  
 XX Mouse; prion protein; transmissible spongiform encephalopathy;  
 KM bovine spongiform encephalopathy; TSE diagnosis; Prp.  
 XX  
 OS Mus sp.  
 XX  
 XX  
 FT Key Location/Qualifiers  
 FT Region 37..68  
 FT /note= "Repeat region consisting of tandem repeats of  
 FT repeat unit: PHGGGWGQ (AAB07319)"  
 FT Disulfide-bond 156..191  
 FT Modified-site 208  
 FT /note= "C-terminal phospho-inositol glycolipid membrane  
 FT anchor (-GPI)"  
 XX  
 XX WO200029849-A1.  
 PN  
 XX  
 XX 25-MAY-2000.  
 PD  
 XX  
 PF 27-OCT-1999; 99WO-FI00896.  
 XX  
 PR 17-NOV-1998; 98FI-00002480.  
 XX  
 PA (WALL-) WALLAC OY.  
 PA (BBSR-) BBSRC OFFICE.  
 XX  
 XX Hope J, Barnard GJR, Birkett CR;  
 PI WPI; 2000-399778/34.  
 DR  
 XX  
 XX New immunoassay for prion protein, used for determination of  
 PT transmissible spongiform encephalopathies in mammals, comprises specific  
 PT capture antibody.  
 PT  
 XX  
 PS Disclosure: Page 41-42; 50pp; English.  
 XX  
 CC The present sequence is the mouse prion protein (Prp) sequence.  
 CC Conversion of the normal cellular form of Prp into an aggregated,  
 CC insoluble isoform is implicated in the pathogenesis of Transmissible  
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine  
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)

CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of  
 CC this protein in body fluid or tissue samples may be measured by an assay  
 CC of the present invention, in which a Prp epitope is captured by an  
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp  
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core  
 CC of Prp that is occluded when the Prp is in an aggregated state  
 XX  
 SQ Sequence 208 AA;  
 Query Match 100.0%; Score 103; DB 3; Length 208;  
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 177 ETDVQMERVVEQMCVTQYQ 196  
 RESULT 7  
 ABG31904  
 ID ABG31904 standard; protein, 208 AA.  
 AC ABG31904;  
 XX  
 XX ABG31904;  
 DT 05-NOV-2002 (first entry)  
 XX  
 DE Chimera-type prion protein #2.  
 XX  
 XX Prion; follicular dendritic cells; FDC; infection; blood preparation;  
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.  
 KM  
 XX  
 OS Synthetic.  
 XX  
 XX WO2000261418-A1.  
 PN  
 XX  
 XX 08-AUG-2002.  
 PD  
 PF 31-JAN-2002; 2002MO-JP000803.  
 XX  
 PR 31-JAN-2001; 2001JP-00024279.  
 XX  
 XX (TOHO) UNIV TOHOKU.  
 PA  
 XX  
 PI Kitamoto T, Miyoshi K, Mohri S;  
 XX WPI; 2002-619277/66.  
 DR  
 XX  
 XX Screening (non-)human prion disease infection factor based on abnormal  
 PT prion protein sedimentation in non-human follicular dendritic cells as  
 PT indication, applicable in safety test on e.g. drugs and cosmetics.  
 PT  
 XX  
 PS Claim 9; Page 55-57; 69pp; Japanese.  
 XX  
 XX This invention relates to a novel method for screening human or non-  
 CC human prion disease infection factor in a sample by using abnormal prion  
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as  
 CC indication. The method of the invention is useful for screening (non-)  
 CC human prion disease infection factor, which is applicable in safety tests  
 CC on drugs like blood preparations, foods and cosmetics, and for developing  
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob  
 CC disease (CJD). The method of the invention is simple and quick. The  
 CC present sequence represents a chimera type prion related protein of the  
 CC invention  
 XX  
 SQ Sequence 208 AA;  
 Query Match 100.0%; Score 103; DB 5; Length 208;  
 Best Local Similarity 100.0%; Pred. No. 6.8e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 178 ETDVQMERVVEQMCVTQYQ 197

```

RESULT 8
ABG31905
ID ABG31905 standard; protein; 209 AA.
XX
XX
AC ABG31905;
XX
XX
DT 05-NOV-2002 (first entry)
XX
XX
DE HCHV type prion protein.
XX
XX
KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
OS Synthetic.
XX
PN WO200261418-A1.
XX
PD 08-AUG-2002.
XX
PF 31-JAN-2002; 2002WO-JP000803.
XX
PR 31-JAN-2001; 2001JP-00024279.
XX
PA (TOHO ) UNIV TOHOKU.
XX
PI Kitamoto T, Miyoshi K, Mohri S;
XX
DR WPI; 2002-619277/66.
XX
PT Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
PT indication; applicable in safety test on e.g. drugs and cosmetics.
XX
XX
XX Claim 9; Page 57-58; 69pp; Japanese.
XX
XX
CC This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a Chv type prion related protein of the
CC invention
XX
SQ Sequence 209 AA;
XX
Query Match 100.0%; Score 103; DB 5; Length 209;
Best Local Similarity 100.0%; Pred. No. 6,9e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 178 ETDVKKMERVVEQMCVTQYQ 197
XX
XX
RESULT 9
AAB30801
ID AAB30801 standard; protein; 211 AA.
XX
XX
AC AAB30801;
XX
XX
DT 02-APR-2001 (first entry)
XX
XX
DE Amino acid sequence of a mouse prion protein.
XX
XX
KM SCHAG; self-coalesce; higher-order aggregate; amyloidogenic domain;
KM aggregation; fibril; phenotypic alteration; gene therapy;
KM disease resistance; plant pigmentation; prion disease.
XX
XX

```

```

OS Mus sp.
XX
XX WO200075324-A2.
XX
XX 14-DEC-2000.
XX
XX
PF 09-JUN-2000; 2000WO-US015876.
XX
XX
PR 09-JUN-1999; 99US-0138833P.
XX
XX (ARCH-) ARCH DEV CORP.
XX
XX Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;
XX
XX WPI; 2001-061723/07.
XX
DR N-PSDB; AAC86686.
XX
XX
PT New nucleic acid encoding chimeric proteins with self-assembly
PT properties, useful e.g. for diagnosis and treatment of prion diseases,
PT also related aggregates, fibrils and polymers.
XX
XX
XX Claim 11; Page 137-138; 188pp; English.
XX
XX
CC The present sequence represents a prion protein. The specification
CC describes chimeric polypeptides, which comprise at least one SCHAG (self-
CC coalesce into higher-order aggregates) amino acid sequence fused in
CC frame with a polypeptide of interest (which is other than a marker
CC protein, a glutathione-S-transferase or a staphylococcal nuclear
CC protein). The specification also describes chimeric polypeptides that
CC comprises an amyloidogenic domain that causes aggregation into fibrils.
CC The chimeric polypeptides are used to prepare polymers with multiple
CC reactivities, e.g. derivatised with enzymes, or specific binding
CC partners, and useful e.g. for performing multi-step chemical reactions.
CC They can be used create an inducible, or stable phenotypic alteration in
CC a cell, e.g. for gene therapy, protein production, imparting disease
CC resistance to plants, altering plant pigmentation and for diagnosis and
CC treatment of prion diseases
XX
SQ Sequence 211 AA;
XX
Query Match 100.0%; Score 103; DB 4; Length 211;
Best Local Similarity 100.0%; Pred. No. 7e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ETDVKKMERVVEQMCVTQYQ 20
DB 179 ETDVKKMERVVEQMCVTQYQ 198
XX
XX
RESULT 10
ABR42793
ID ABR42793 standard; protein; 225 AA.
XX
XX
AC ABR42793;
XX
XX
DT 08-SEP-2003 (first entry)
XX
XX
DE Rat prion protein.
XX
XX
KM Rat; prion protein; prionosis; nootropic; neuroprotective; immunogen;
KM vaccine.
XX
XX
OS Rattus sp.
XX
XX WO2003045128-A2.
XX
XX
PD 05-JUN-2003.
XX
XX
PF 21-NOV-2002; 2002WO-US037634.
XX
XX
PR 21-NOV-2001; 2001US-0331801P.
XX
XX (UNIV ) UNIV NEW YORK STATE.
XX
XX

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XX Frangione B, Wisniewski T, Sigurdsson EM;  
 XX WPI; 2003-505145/47.  
 XX  
 XX New synthetic immunogenic but non-deposit forming peptides, useful for  
 PT inducing an immune response to prions, amyloids, amylin or amylin  
 PT fibrils, particularly for treating e.g. Alzheimer's, scrapie or  
 PT Creutzfeldt-Jacob disease.  
 XX  
 XX Disclosure; Page 228-229; 265pp; English.  
 XX  
 XX The present sequence is the amino acid sequence of rat prion protein. The  
 CC invention provides a synthetic immunogenic but non-deposit-forming  
 CC polypeptide that is homologous to human (see ABR42789) or bovine (see  
 CC ABR42798) prion protein. Such peptides, alone or conjugated to an  
 CC immunostimulant, are used to induce an immune response to prion, and  
 CC immunizing compositions comprising the peptides are used in a claimed  
 CC method for inducing an immune response to hnp and prion deposits.  
 CC Antibodies directed against the peptides can be used in passive  
 CC immunization.  
 CC  
 XX Sequence 225 AA;  
 SQ  
 Query Match 100.0%; Score 103; DB 6; Length 225;  
 Best Local Similarity 100.0%; Pred. No. 7.4e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVXKMERVVEQMCVTQYQ 20  
 DB 172 ETDVXKMERVVEQMCVTQYQ 191  
 RESULT 11  
 ADB85240  
 ID ADB85240 standard; protein; 226 AA.  
 XX  
 AC ADB85240;  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Rat prion-related protein SEQ ID NO:121.  
 XX  
 KM rat; streptozocin; kinase; phosphatase; ion channel protein; receptor;  
 KM transporter; G-protein coupled receptor; GPCR; DNA-binding proteins;  
 KM protease; enzyme; analgesic; gene therapy; pain; diabetes.  
 XX  
 OS Rattus norvegicus.  
 XX  
 PN EPI284297-A2.  
 XX  
 PD 19-FEB-2003.  
 XX  
 PF 26-JUL-2002; 2002EP-00255228.  
 XX  
 PR 27-JUL-2001; 2001GB-00018354.  
 PR 07-FEB-2002; 2002GB-00002880.  
 XX  
 XX (WARN ) WARNER LAMBERT CO.  
 XX  
 PA Brooksbank RA, Dixon AK, Lee K, Rimmock RD;  
 PI WPI; 2003-364994/35.  
 DR N-PSDB; ADB85241.  
 XX  
 PT Use of gene sequence that is down-regulated in response to streptozocin-  
 PT induced diabetes, vector, host cell, animal, polypeptide and antibody, in  
 PT screening of compounds for treating or diagnosing pain.  
 XX  
 XX Disclosure; Page 190; 256pp; English.  
 CC The invention relates to a novel isolated gene sequence that is down-  
 CC regulated in the spinal cord in response to streptozocin-induced

CC diabetes, or comprising, hybridizing or having at least 80% sequence  
 CC identity to a sequence whose expression products are kinases,  
 CC phosphatases, ion channel proteins, receptors, transporters, G-protein  
 CC coupled receptor proteins, DNA-binding proteins, proteases or enzymes,  
 CC given in the specification. A gene of the invention has analgesic  
 CC activity, and may have a use in gene therapy. The gene sequences, vector,  
 CC host cell, animal, polypeptide and antibody are useful for screening of  
 CC compounds for diagnosing or treating pain. The kits are useful for  
 CC simultaneous, separate or sequential detecting and/or quantifying down-  
 CC regulation of a gene sequence in the spinal cord of a mammal in response  
 CC to streptozocin-induced diabetes. The compound or pharmaceutical  
 CC composition is useful as a medication for treating or diagnosing pain.  
 CC The present sequence represents a protein encoded by a gene of the  
 CC invention.  
 CC  
 XX Sequence 226 AA;  
 SQ  
 Query Match 100.0%; Score 103; DB 7; Length 226;  
 Best Local Similarity 100.0%; Pred. No. 7.5e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVXKMERVVEQMCVTQYQ 20  
 DB 172 ETDVXKMERVVEQMCVTQYQ 191  
 RESULT 12  
 AAR86714  
 ID AAR86714 standard; protein; 254 AA.  
 XX  
 AC AAR86714;  
 XX  
 DT 15-OCT-1996 (first entry)  
 XX  
 DE Mouse prion protein, MoPrP.  
 XX  
 KM Chimeric gene; chimeric prion; transgenic animal; diagnosis;  
 KM spongiform encephalopathy; PrP; central nervous system; CNS;  
 KM Creutzfeldt-Jakob disease; CJD; BSE.  
 XX  
 OS Mus musculus;  
 XX  
 PN WO9531466-A1;  
 XX  
 PD 23-NOV-1995;  
 XX  
 PF 10-APR-1995; 95WO-US004426.  
 XX  
 PR 13-MAY-1994; 94US-00242188.  
 XX  
 XX (REGC ) UNIV CALIFORNIA.  
 XX  
 PA Prusiner SB, Scott MR, Telling G;  
 PI WPI; 1996-010868/01.  
 DR  
 XX Chimeric prion protein gene - for formation of a transgenic animal  
 PT susceptible to prion infection by prion(s), normally specific for a  
 PT different species.  
 XX  
 XX Disclosure; Fig 3; 65pp; English.  
 PS  
 XX Pathogenic prions in a sample can be detected by injecting the sample to  
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric  
 CC PrP gene in which the gene includes a portion of a gene of the animal  
 CC (e.g. human) in danger of infection from prions in the sample. Preferred  
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment  
 CC of this mouse PrP, MoPrP, is replaced with the corresponding human PrP  
 CC sequence. The chimeric PrP, designated Mhu2MPrP, differs from this MoPrP  
 CC by 9 AA between residues 96 and 167  
 XX  
 XX ,Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 8.5e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQYQ 20  
 DB 199 ETDVKMERVVEQMCVTQYQ 218

## RESULT 13

AAW69659  
 ID AAW69659 standard; protein; 254 AA.

AAW69659;

25-MAR-2003 (revised)

19-OCT-1998 (first entry)

Mouse prion protein MoPrP.

Mouse; prion protein; PrP; transgenic animal; artificial gene;

Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

Mus sp.

US5792901-A.

11-AUG-1998

30-JUL-1996; 96US-00692892.

13-MAY-1994; 94US-00242188.

31-JUL-1995; 95US-00509261.

31-AUG-1995; 95US-00521992.

(REGC ) UNIV CALIFORNIA.

Scott MR, Telling GC, Prusiner SB;

WPI; 1998-456207/39.

Transgenic mouse with altered PrP gene - for detecting disease-causing

prions.

Example 8; Fig 3; 37pp; English.

A transgenic mouse has been developed which comprises a genome in which both alleles of an endogenous PrP (prion protein) gene of the mouse are ablated, the genome containing operatively inserted all exogenous non-mouse PrP gene. The mouse is susceptible to infection with prions which generally only infect a genetically diverse mammal due to the presence of the exogenous PrP gene and ablated endogenous PrP gene. It exhibits symptoms of prion disease within 200 days or less after inoculation with prions which generally only infect a genetically diverse mammal. Also described in the present invention are: (A) a method of producing the transgenic mouse; and (B) determining the presence of infectious prions in a sample obtained from a bovine. The transgenic mouse is used to detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative disease of humans caused by prions. The present sequence represents mouse prion protein (MoPrP), used in an example from the present invention. (updated on 25-MAR-2003 to correct PF field.)

Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.5e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQYQ 20  
 DB 199 ETDVKMERVVEQMCVTQYQ 218

## RESULT 14

AAW85900  
 ID AAW85900 standard; peptide; 254 AA.

AAW85900;

12-FEB-1999 (first entry)

Mouse prion protein (PrP) sequence.

PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening; food;

Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;

cosmetic; therapeutic; mouse.

Mus sp.

US5846533-A.

08-DEC-1998.

13-SEP-1996; 96US-00713939.

14-SEP-1995; 95US-00528104.

(REGC ) UNIV CALIFORNIA.

(SCRI ) SCRIPPS RES INST.

Prusiner SB, Williamson RA, Burton DR;

WPI; 1999-058996/05.

Antibody specific for scrapie isoform of prion protein - useful for

diagnosis and therapy.

Disclosure; Col 39-42; 58pp; English.

This represents a mouse prion protein (PrP) sequence. The invention relates to an antibody that is capable of binding to native PrP(Sc), the scrapie isoform of PrP. The antibody is produced by a method that comprises synthesizing a library of antibodies on phages, contacting the phages with a composition containing PrP proteins, isolating phages that bind to native PrP(Sc) in situ, obtaining an antibody from the phages, and optionally analysing the phages to determine a nucleic acid sequence encoding an amino acid sequence to which the native PrP(Sc) binds. The antibody is used to detect disease-associated PrP, especially in Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They can also be used to neutralise the infectivity of PrP(Sc). Assays using the antibodies can be used to screen for disease-associated PrP in pharmaceutical products, foods and cosmetics or for therapeutic purposes

Sequence 254 AA;

Query Match 100.0%; Score 103; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 8.5e-09;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQMCVTQYQ 20  
 DB 199 ETDVKMERVVEQMCVTQYQ 218

## RESULT 15

AAV07996  
 ID AAV07996 standard; protein; 254 AA.

AAV07996;

08-JUL-1999 (first entry)

Murine prion protein.

Prion protein; PrP; human; polyclonal antiserum; immunoassay; detection;

bovine; murine.

```

XX Mus sp.
OS
XX DE19745443-A1.
XX
XX 22-APR-1999.
XX
XX 15-OCT-1997; 97DE-01045443.
XX
XX 15-OCT-1997; 97DE-01045443.
XX
XX (HERZ/) HERZOG-MESMER A.
XX
XX Mesmer AH, Kiselev OI, Scheller A;
XX
XX WPI, 1999-255775/22.
XX
XX Diagnostic polyclonal antiserum specific for prion protein - obtained by
XX immunisation with metal-containing polypeptide.
XX
XX Claim 3; Fig 1; 12pp; German.
XX
XX This invention describes a novel process for producing a polyclonal
XX antiserum against a human or animal prion protein (PrP) which can be used
XX in immunoassays for detecting PrP's. The method comprises (a) selecting a
XX polypeptide that has a length of at least 10 amino acids and has an amino
XX acid sequence at least 70% homologous to that of human, bovine or murine
XX PrP in a region of at least 10 consecutive amino acids (b) binding a
XX metal to the polypeptide by reaction with a metal compound and (c)
XX injecting the metal-containing polypeptide into a host animal, optionally
XX together with adjuvants, to induce production of a polyclonal antiserum
XX
XX
SQ Sequence 254 AA;
Query Match 100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 8.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 ETDVCMERVVEQMCVTQYQ 20
DB 199 ETDVCMERVVEQMCVTQYQ 218

```

Search completed: April 30, 2004, 15:28:54  
Job time : 61 sec

GenCore version 5.1.6  
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# OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 42 Seconds  
(without alignments)  
94.183 Million cell updates/sec

Title: US-09-603-832-5  
Sequence: 1 NDMEDRYRNMWR 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : A\_Geneseq\_29Jan04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	14	4	AAB6613
2	86	100.0	15	7	ADD24281
3	86	100.0	16	5	ABG80700
4	86	100.0	16	7	ADD24285
5	86	100.0	26	5	ABG32299
6	86	100.0	26	5	ABG80699
7	86	100.0	26	5	ADD24284
8	86	100.0	27	7	ADDE06768
9	86	100.0	33	3	AAB15057
10	86	100.0	42	7	ADDE06769
11	86	100.0	124	5	ABG94340
12	86	100.0	124	5	ABG80652
13	86	100.0	124	7	ADD24200
14	86	100.0	208	3	AAB07316
15	86	100.0	208	3	AAB07327
16	86	100.0	211	4	AAB30801
17	86	100.0	225	6	ABR42793
18	86	100.0	226	7	ADDE06769
19	86	100.0	254	2	AAB6714
20	86	100.0	254	2	AAB65659
21	86	100.0	254	2	AAB65659
22	86	100.0	254	2	AAB65659
23	86	100.0	254	4	AAB61772
24	86	100.0	254	4	AAB82118
25	86	100.0	254	4	AAB82111

26	86	100.0	254	4	AAB84522	AAB84522	Amino aci
27	86	100.0	254	4	AAG65852	AAG65852	Mouse pri
28	86	100.0	254	5	AAM50888	AAM50888	Mouse pri
29	86	100.0	254	5	ABP51786	ABP51786	Mouse pri
30	86	100.0	254	5	ABG31906	ABG31906	Mouse pri
31	86	100.0	254	5	ABR04427	ABR04427	Mouse pr
32	86	100.0	254	5	AAB15602	AAB15602	Mouse pr
33	86	100.0	254	5	AAB15609	AAB15609	Mouse pr
34	86	100.0	254	6	ABU58867	ABU58867	Mouse pri
35	86	100.0	254	6	AAB33226	AAB33226	Mouse pr
36	86	100.0	254	6	ABR42792	ABR42792	Mouse pri
37	86	100.0	254	7	ADC59531	ADC59531	Mouse pri
38	86	100.0	254	7	ADC52088	ADC52088	Mouse pri
39	86	100.0	254	7	ADD24194	ADD24194	Mouse pri
40	86	100.0	254	7	ADE56264	ADE56264	Rat Prote
41	86	100.0	254	7	ADE06739	ADE06739	Mouse pri
42	86	100.0	254	7	ADE06740	ADE06740	Mouse pri
43	86	100.0	255	4	AAB72357	AAB72357	Murine pr
44	86	100.0	255	4	AAB72358	AAB72358	Murine pr
45	86	100.0	255	4	AAB72359	AAB72359	Murine pr

## ALIGNMENTS

RESULT 1	AAB6613	standard; peptide; 14 AA.
XX	XX	AAB6613;
AC	XX	05-APR-2001 (first entry)
DT	XX	Mouse prion helix 1.
DE	XX	Mouse prion helix 1.
KW	XX	Coiled-coil; prion; helix.
OS	XX	Mus sp.
PN	XX	WO200100010-A1.
PD	XX	04-JAN-2001.
PF	XX	23-JUN-2000; 2000MO-CA000736.
PR	XX	25-JUN-1999; 99US-0141203P.
PA	XX	(KOND//) KONDEJEMSKI L H.
PA	XX	(IRVI//) IRVIN R T.
PA	XX	(HODG//) HODGES R S.
PI	XX	Kondejski LH, Irvin RT, Hodges RS;
DR	XX	WPI; 2001-137855/14.
PT	XX	Coiled-coil polypeptide compositions useful for generating antibodies
PT	XX	against a specific epitope, comprises a specific epitope from alpha-
PT	XX	helical surface region of a protein inserted into coiled-coil polypeptide
PT	XX	template.
PS	XX	Disclosure; Fig 4; 25pp; English.
XX	XX	The present invention relates to a coiled-coil polypeptide with a selected
CC	XX	epitope from solvent accessible region of a protein inserted into a
CC	XX	coiled-coil polypeptide template. The coiled-coil polypeptides are useful
CC	XX	for generating antibodies specific to a selected epitope from a selected
CC	XX	protein and also for identifying ligands that selectively bind the alpha-
CC	XX	helical segment contained in the native protein. The conformation
CC	XX	specific antibodies are useful as therapeutic and diagnostic ligands
XX	XX	Sequence 14 AA;
SQ	XX	Query Match 100.0%; Score 86; DB 4; Length 14;

Best Local Similarity 100.0%; Pred. No. 1.3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
Db 1 NDWEDRYRYENMYR 14

## RESULT 2

ADD24281  
ID ADD24281 standard; peptide; 15 AA.

ADD24281;

15-JAN-2004 (first entry)

Murine prion protein PrP peptide prpshort.

vacine composition; virus-like particle; core particle;  
first attachment site; antigen; antigenic determinant; prion protein;  
PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;  
prion disease; Bovine Spongiform Encephalopathy; BSE;  
Creutzfeldt-Jakob Disease; prion.

prion.

MO2003059386-A2.

24-JUL-2003.

17-JAN-2003; 2003WO-EP000460.

18-JAN-2002; 2002US-00050902.

21-JAN-2002; 2002WO-IB000156.

08-JUL-2002; 2002US-0393725P.

18-JUL-2002; 2002US-0396590P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

Bachmann M, Maurer P, Fellisch E, Renner WA;

WPI; 2003-598483/56.

A vaccine composition for preventing or treating prion diseases (e.g.

Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

phage) and at least one prion protein or peptide bound to the virus-like

particle.

Example 7; Page 102; 246pp; English.

This invention relates to a novel vaccine composition comprising a virus-  
like or a core particle with at least one first attachment site and at  
least one antigen or antigenic determinant that is a prion protein (PrP)  
or its dimer, or a PrP peptide, the antigen or antigenic determinant  
being bound to the virus-like or core particle. The vaccine of the  
invention may have neuroprotective or antiinflammatory activity. The  
composition is useful as a medicament or in manufacturing a medicament  
for the treatment or prevention of prion diseases. The prion diseases may  
include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
Disease. The present sequence is that of a peptide fragment of a prion  
protein which may be used for the production of the vaccine of the  
invention.

Sequence 15 AA;

Query Match 100.0%; Score 86; DB 7; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.4e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
Db 2 NDWEDRYRYENMYR 15

RESULT 3  
ID ABG80700 standard; protein; 16 AA.

ABG80700;

29-NOV-2002 (first entry)

Prion protein peptide cprshort.

molecular antigen array; vaccine; antigen; antimicrobial;  
molecular scaffold; amyloid beta; Abeta 1-42; influenza;  
graft versus host disease; TGF-mediated allergic reaction; anaphylaxis;  
adult respiratory distress syndrome; ARDS; Crohn's disease;  
allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;  
grave's disease; systemic lupus erythematosus; osteoporosis;  
inflammatory immune disease; myasthenia gravis; multiple sclerosis;  
immunoproliferative disease lymphadenopathy; Alzheimer's disease;  
rheumatoid arthritis; diabetes; infectious disease; factor xa;  
enterokinase; cysteine-containing linker.

Unidentified.

MO200256907-A2.

25-JUL-2002.

21-JAN-2002; 2002WO-IB000168.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-0326988P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

(NOVS) NOVARTIS PHARMA AG.

(MAUR) MAURER P.

(LECH) LECHNER F.

(ORTM) ORTMANN R.

(LUEB) LUEBEND R.

(STAU) STAUFENBIEL M.

(FREY) FREY P.

Maurer P, Lechner F, Ortmann R, Luegend R, Staufenbiel M, Frey P;

Renner WA, Bachmann M, Tissot A, Seibel P, Plosser C;

WPI; 2002-636514/68.

Molecular antigen array used in the production of vaccines for infectious

diseases.

Example 8; Page 120; 418pp; English.

The invention relates to a composition comprising: (a) a non-natural  
molecular scaffold comprising: (i) a core particle selected from: (1) a  
core particle of a non-natural origin; and (2) a core particle of natural  
origin; and (ii) an antigen or antigenic determinant comprising at least one first attachment  
site, where the antigen or antigenic determinant is connected to the core particle by at least  
one covalent bond; (b) an antigen or antigenic determinant with at least  
one second attachment site, where the antigen or antigenic determinant is  
connected to the core particle by at least one covalent bond; and where the second  
attachment site is selected from: (i) an attachment site not naturally  
occurring with the antigen or antigenic determinant; and (ii) an  
attachment site naturally occurring with the antigen or antigenic  
determinant, where the second attachment site is capable of association  
through at least one non-peptide bond to the first attachment site; and  
where the antigen or antigenic determinant and the scaffold interact  
through the association to form an ordered and repetitive antigen array.  
Also included is a process for producing a non-naturally occurring  
ordered and repetitive antigen array. The composition is used in  
immunisation and as a vaccine for diseases such as influenza, graft



CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult  
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,  
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,  
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia  
 CC gravis, immunoproliferative disease lymphadenopathy,  
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,  
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,  
 CC osteoporosis and infectious diseases. The present sequence is an antigen  
 CC for use in the array of the invention. The antigen is modified to possess  
 CC a cleavage site (enterokinase or factor xa) and a cysteine-containing N-  
 CC or C-terminal linker peptide which serves as the attachment point to a  
 CC virus like particle or bacterial protein (the scaffold protein)

SQ Sequence 16 AA:

Query Match 100.0%; Score 86; DB 5; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||||  
 Db 3 NDWEDRYRENMYR 16

RESULT 4  
 ADD24285  
 ID ADD24285 standard; peptide; 16 AA.

AC ADD24285;  
 DT 15-JAN-2004 (first entry)  
 XX Murine prion protein PrP peptide cprshort.  
 DE  
 XX  
 KM vaccine composition; virus-like particle; core particle;  
 KM first attachment site; antigen; antigenic determinant; prion protein;  
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;  
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;  
 KM Creutzfeldt-Jakob Disease; prion.  
 KM  
 OS Synthetic.  
 OS prion.  
 PN WO2003059386-A2.  
 XX  
 XX 24-JUL-2003.  
 PD  
 XX 17-JAN-2003; 2003MO-EP000460.  
 PF  
 XX 18-JAN-2002; 2002US-00050902.  
 PR 21-JAN-2002; 2002MO-IB000166.  
 PR 08-JUL-2002; 2002US-0393725P.  
 PR 18-JUL-2002; 2002US-0396590P.  
 XX  
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;  
 XX WPI; 2003-598483/56.  
 DR  
 XX A vaccine composition for preventing or treating prion diseases (e.g.  
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-  
 PT phage) and at least one prion protein or peptide bound to the virus-like  
 PT particle.  
 XX  
 PS Example 14; Page 109; 246pp; English.  
 CC This invention relates to a novel vaccine composition comprising a virus-  
 CC like or a core particle with at least one first attachment site and at  
 CC least one antigen or antigenic determinant that is a prion protein (PrP)  
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant  
 CC being bound to the virus-like or core particle. The vaccine of the  
 CC invention may have neuroprotective or antiinflammatory activity. The

CC composition is useful as a medicament or in manufacturing a medicament  
 CC for the treatment or prevention of prion diseases. The prion diseases may  
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
 CC Disease. The present sequence is that of a peptide fragment of a prion  
 CC protein which may be used for the production of the vaccine of the  
 CC invention.

SQ Sequence 16 AA:

Query Match 100.0%; Score 86; DB 7; Length 16;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||||  
 Db 3 NDWEDRYRENMYR 16

RESULT 5  
 ABG32299  
 ID ABG32299 standard; peptide; 26 AA.

AC ABG32299;  
 DT 10-DEC-2002 (first entry)  
 XX Murine prion protein (PrP) cprshort peptide.  
 DE  
 XX  
 KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;  
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;  
 KM vaccine; infectious disease; prion.  
 KM  
 OS Mus sp.  
 OS  
 PN WO200256905-A2.  
 XX  
 XX 25-JUL-2002.  
 PD  
 XX 21-JAN-2002; 2002MO-IB000166.  
 PF  
 XX 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288549P.  
 PR 05-OCT-2001; 2001US-0326998P.  
 PR 07-NOV-2001; 2001US-0331045P.  
 XX  
 XX  
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;  
 PI Ploessek C;  
 XX WPI; 2002-627351/67.  
 DR  
 XX Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.  
 PT  
 XX  
 PS Example 8; Page 120; 441pp; English.  
 CC This invention relates to a novel ordered and repetitive antigen array  
 CC used in the production of vaccines for infectious diseases. The invention  
 CC also discloses a composition comprising a non-natural molecular scaffold  
 CC comprising a core particle selected from a particle of a non-natural  
 CC origin and a core particle of natural origin and an organism comprising  
 CC at least one first attachment site, where the organism is connected to  
 CC the core particle by at least one covalent bond. Also disclosed is an  
 CC antigen or antigenic determinant with at least one second attachment  
 CC site, where the antigen or antigenic determinant is amyloid beta peptide  
 CC (Abeta1-42) or its fragment and where the second attachment site is  
 CC selected from an attachment site not naturally occurring with the antigen  
 CC or antigenic determinant and an attachment site naturally occurring with  
 CC the antigen or antigenic determinant, where the second attachment site is  
 CC capable of association through at least one non-peptide bond to the first  
 CC attachment site and where the antigen or antigenic determinant and the  
 CC scaffold interact through the association to form an ordered and

CC repetitive antigen array. The invention also comprises a coat protein  
 CC capable of forming a capsid which comprises mutant Obeta coat proteins  
 CC having an amino acid sequence selected from five amino acid sequences  
 CC fully defined in the specification. The compounds of the invention may  
 CC have anticarcinogenic, antiallergic, immunomodulatory, cytostatic,  
 CC antiviral, antibacterial, or hypoglycaemic activities and may be used in  
 CC immunization and as a vaccine. The present sequence represents a peptide  
 CC sequence used to create the compositions of the invention

XX Sequence 26 AA;

Query Match 100.0%; Score 86; DB 5; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 DB 13 NDWEDRYRENMYR 26

RESULT 6

ID ABG80699 standard; protein; 26 AA.

XX ABG80699;

DT 29-NOV-2002 (first entry)

DE Prion protein peptide cprplong.

XX Molecular antigen array; vaccine; antigen; antimicrobial;  
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza;  
 KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;  
 KW adult respiratory distress syndrome; ARDS; Crohn's disease; adult  
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;  
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;  
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;  
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;  
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;  
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;  
 KW enterokinase; cysteine-containing linker.

XX Unidentified.

XX WO200256907-A2.

XX .25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000168.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326988P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX (NOVS) NOVARTIS PHARMA AG.

XX (MAUR) MAURER P.

XX (LECH) LECHNER F.

XX (ORTM) ORTMANN R.

XX (LUEO) LUEGEND R.

XX (STAU) STAUFENBIEL M.

XX (FREY) FREY P.

XX MAURER P, LECHNER F, ORTMANN R, LUEGEND R, STAUFENBIEL M, FREY P;

XX REMER WA, BACHMANN M, TISSOT A, SEBBEL P, PLOSEK C;

XX WPI, 2002-636514/68.

XX Molecular antigen array used in the production of vaccines for infectious  
 XX diseases.

XX Example 8; Page 120; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural  
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a  
 CC core particle of a non-natural origin; and (2) a core particle of natural  
 CC origin; and (ii) an organism comprising at least one first attachment  
 CC site, where the organism is connected to the core particle by at least  
 CC one covalent bond; (b) an antigen or antigenic determinant with at least  
 CC one second attachment site, where the antigen or antigenic determinant is  
 CC amyloid beta peptide (beta 1-42) or its fragment, and where the second  
 CC attachment site is selected from: (i) an attachment site not naturally  
 CC occurring with the antigen or antigenic determinant; and (ii) an  
 CC attachment site naturally occurring with the antigen or antigenic  
 CC determinant, where the second attachment site is capable of association  
 CC through at least one non-peptide bond to the first attachment site; and  
 CC where the antigen or antigenic determinant and the scaffold interact  
 CC through the association to form an ordered and repetitive antigen array.  
 CC Also included is a process for producing a non-naturally occurring  
 CC ordered and repetitive antigen array. The composition is used in  
 CC immunisation and as a vaccine for diseases such as influenza, graft  
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult  
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,  
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,  
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia  
 CC gravis, immunoproliferative disease lymphadenopathy,  
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,  
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,  
 CC osteoporosis and infectious diseases. The present sequence is an antigen  
 CC for use in the array of the invention. The antigen is modified to possess  
 CC a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N-  
 CC or C-terminal linker peptide which serves as the attachment point to a  
 CC virus like particle or bacterial protein (the scaffold protein)

SO Sequence 26 AA;

Query Match 100.0%; Score 86; DB 5; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 DB 13 NDWEDRYRENMYR 26

RESULT 7  
 ADD24284  
 ID ADD24284 standard; peptide; 26 AA.

XX ADD24284;

XX 15-JAN-2004 (first entry)

XX Murine prion protein PrP peptide cprplong.

XX vaccine composition; virus-like particle; core particle;  
 KW first attachment site; antigen; antigenic determinant; prion protein;  
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;  
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;  
 KW Creutzfeldt-Jakob Disease; prion.

XX Synthetic.

XX prion.

XX WO2003059386-A2.

XX 24-JUL-2003.

XX 17-JAN-2003; 2003WO-EP000460.

XX 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-IB000168.

XX 08-JUL-2002; 2002US-0393725P.

XX 18-JUL-2002; 2002US-0396590P.

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 XX  
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,  
 XX  
 DR WPI; 2003-598483/56.  
 XX  
 PT A vaccine composition for preventing or treating prion diseases (e.g.,  
 PT Creutzfeldt-Jakob Disease) comprising a virus-like particle (e.g., RNA-  
 PT phase) and at least one prion protein or peptide bound to the virus-like  
 PT particle.  
 XX  
 PS Example 14; Page 109; 246pp; English.  
 XX  
 CC This invention relates to a novel vaccine composition comprising a virus-  
 CC like or a core particle with at least one first attachment site and at  
 CC least one antigen or antigenic determinant that is a prion protein (Prp)  
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant  
 CC being bound to the virus-like or core particle. The vaccine of the  
 CC invention may have neuroprotective or antiinflammatory activity. The  
 CC composition is useful as a medicament or in manufacturing a medicament  
 CC for the treatment or prevention of prion diseases. The prion diseases may  
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
 CC Disease. The present sequence is that of a peptide fragment of a prion  
 CC protein which may be used for the production of the vaccine of the  
 CC invention.  
 XX  
 SQ Sequence 26 AA;  
 Query Match 100.0%; Score 86; DB 7; Length 26;  
 Best Local Similarity 100.0%; Pred. No. 2.5e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 NDWEDRYRNNMYR 14  
 Db 13 NDWEDRYRNNMYR 26  
 RESULT 8  
 ADE06768  
 ID ADE06768 standard; peptide; 27 AA.  
 XX  
 AC ADE06768;  
 XX  
 DT 29-JAN-2004 (first entry)  
 XX  
 DE Mouse prion protein related peptide.  
 XX  
 KW hybrid polypeptide; protein aggregation; prion polypeptide;  
 KW neuroprotective; nootropic; antidiabetic; anticonvulsant;  
 KW cerebroprotective; antiparkinsonian; cyostatic; nephroprotective; cardiant;  
 KW antiinflammatory; antiarteriosclerotic; gene therapy;  
 KW Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;  
 KW Alzheimer's disease; Type II diabetes; Huntington's disease;  
 KW immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;  
 KW amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;  
 KW frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;  
 KW familial amyloidotic polyneuropathy; medullary carcinoma;  
 KW chronic renal failure; congestive heart failure; chronic inflammation;  
 KW atherosclerosis.  
 XX  
 OS Synthetic.  
 OS Mus musculus.  
 XX  
 PN MO2003085086-A2.  
 XX  
 PD 16-OCT-2003.  
 XX  
 PE 08-APR-2003; 2003MO-US010856.  
 XX  
 PR 09-APR-2002; 2002US-0371610P.  
 XX  
 PA (SCRI) SCRIPPS RES INST.  
 XX

PI Burton DR, Williamson RA, Moroncini G;  
 XX  
 DR WPI; 2003-877028/81.  
 XX  
 PT New motif-grafted hybrid polypeptides binding to the infectious form of a  
 PT prion, useful for diagnosing or treating diseases of protein aggregation  
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or  
 PT diabetes.  
 XX  
 PS Example 2; Fig 1A; 115pp; English.  
 XX  
 CC The present invention describes a hybrid polypeptide (I) comprising: (a)  
 CC a polypeptide motif containing a sufficient number of contiguous amino  
 CC acid residues from a polypeptide associated with a disease of protein  
 CC aggregation or conformation to bind an aggregating form of the  
 CC polypeptide or to a disease-associate conformer of the polypeptide; and  
 CC (b) an additional amino acids from a polypeptide other than the  
 CC polypeptide from which the motif is derived, where the resulting hybrid  
 CC polypeptide binds with greater affinity to a disease causing or  
 CC infectious conformer of the polypeptide than is the source of the  
 CC polypeptide motif compared to a benign form of the polypeptide. Also  
 CC described: (1) a nucleic acid molecule encoding (1); (2) a vector  
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;  
 CC (4) detecting an isoform or a PrpSC form of a prion polypeptide or a  
 CC polypeptide associated with a disease of protein aggregation, in a sample  
 CC; (5) a solid support comprising a plurality of polypeptides described  
 CC above; (6) detecting cells that contain a protein conformer associated  
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule  
 CC that specifically interacts with one conformer of a protein involved in  
 CC the disease mentioned above; and (8) an anti-idiotype antibody that  
 CC specifically binds to an infectious form of a prion protein. (1) has  
 CC neuroprotective, nootropic, antidiabetic, anticonvulsant,  
 CC cerebroprotective, antiparkinsonian, cyostatic, nephroprotective, cardiant,  
 CC antiinflammatory and antiarteriosclerotic activities, and can be used in  
 CC gene therapy. The composition and methods of the present invention can be  
 CC used in diagnosing or treating diseases of protein aggregation or  
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine  
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,  
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis  
 CC associated with chronic inflammatory disease, hereditary systemic  
 CC amyloidosis associated with autosomal dominant inheritance of variant  
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,  
 CC Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma  
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma  
 CC of thyroid, chronic renal failure, congestive heart failure, senile  
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis  
 CC or familial amyloidosis. The present sequence is used in the  
 CC exemplification of the present invention.  
 XX  
 SQ Sequence 27 AA;  
 Query Match 100.0%; Score 86; DB 7; Length 27;  
 Best Local Similarity 100.0%; Pred. No. 2.6e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 NDWEDRYRNNMYR 14  
 Db 10 NDWEDRYRNNMYR 23  
 RESULT 9  
 AAB15057  
 ID AAB15057 standard; peptide; 33 AA.  
 XX  
 AC AAB15057;  
 XX  
 DT 18-DEC-2000 (first entry)  
 XX  
 DE Mouse prion protein peptide homologous to ovine sequence 145-177.  
 XX  
 KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;  
 KW transmissible spongiform encephalopathy; antibody;  
 KW bovine spongiform encephalopathy; sheep; cattle; human.  
 XX

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XX Mus sp.
OS WO200048003-A1.
XX
XX 17-AUG-2000.
XX
XX 09-FEB-2000; 2000WO-NL000079.
XX
XX 11-FEB-1999; 99EP-00200391.
XX
XX (DIEN-) STICHTING DIENST LANDBOUKUNDIG ONDERZOE.
XX
XX Garsen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LTM;
XX Schreuder BEC, Bosers A;
XX WPI; 2000-506099/45.
XX
XX Use of guanidine thiocyanate for reducing risk of false-positive results
XX in testing mammalian sample for aberrant prion protein, useful for
XX detection of transmissible spongiform encephalopathies.
XX
XX Disclosure; Fig 2; 49pp; English.
XX
XX The present invention relates to a method for reducing the risk of
XX scoring a false positive test result in testing a sample for aberrant
XX prion protein. The method involves the use of guanidine thiocyanate
XX (GdnSCN) or its functional equivalent. This test is highly useful for
XX testing for transmissible spongiform encephalopathies (TSEs) such as BSE
XX (bovine spongiform encephalopathy). The method allows a faster, simpler
XX and more reliable method for monitoring cattle and sheep for the presence
XX of aberrant prion protein before it reaches the human and animal food
XX chain. In the invention antipeptide antibodies were raised against sheep
XX prion protein peptides. The present sequence is the mouse prion protein
XX sequence homologous to the sheep peptide indicated
XX
XX Sequence 33 AA;
XX
XX Query Match 100.0%; Score 86; DB 3; Length 33;
XX Best Local Similarity 100.0%; Pred. No. 3.2e-06;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NDWEDRYRNMNR 14
XX |||||
XX 2 NDWEDRYRNMNR 15
XX
XX RESULT 10
XX ADE06769
XX ID ADE06769 standard; peptide; 42 AA.
XX
XX ADE06769;
XX
XX 29-JAN-2004 (first entry)
XX
XX Mouse prion protein related peptide.
XX
XX hybrid polypeptide; protein aggregation; prion polypeptide;
XX neuroprotective; neurotropic; antidiabetic; anticonvulsant;
XX cerebrotectic; antiparkinsonian; cytostatic; nephrotoxic; cardiac;
XX antiinflammatory; antiarteriosclerotic; gene therapy;
XX Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
XX Alzheimer's disease; Type II diabetes; Huntington's disease;
XX immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
XX amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
XX frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
XX familial amyloidotic polyneuropathy; medullary carcinoma;
XX chronic renal failure; congestive heart failure; chronic inflammation;
XX atherosclerosis.
XX
XX Synthetic.
XX Mus musculus.
XX

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XX WO2003085086-A2.
XX
XX 16-OCT-2003.
XX
XX 08-APR-2003; 2003WO-US010856.
XX
XX 09-APR-2002; 2002US-0371610P.
XX
XX (SCRI) SCRIPPS RES INST.
XX
XX Burton DR, Williamson RA, Moroncini G;
XX WPI; 2003-677026/81.
XX
XX New motif-grafted hybrid polypeptides binding to the infectious form of a
XX prion, useful for diagnosing or treating diseases of protein aggregation
XX or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
XX diabetes.
XX
XX Example 2; Fig 1A; 115pp; English.
XX
XX The present invention describes a hybrid polypeptide (I) comprising: (a)
XX a polypeptide motif containing a sufficient number of contiguous amino
XX acid residues from a polypeptide associated with a disease of protein
XX aggregation or conformation to bind an aggregating form of the
XX polypeptide or to a disease-associate conformer of the polypeptide; and
XX (b) an additional amino acids from a polypeptide other than the
XX polypeptide from which the motif is derived, where the resulting hybrid
XX polypeptide binds with greater affinity to a disease causing or
XX infectious conformer of the polypeptide than is the source of the
XX polypeptide motif compared to a benign form of the polypeptide. Also
XX described: (1) a nucleic acid molecule encoding (1); (2) a vector
XX comprising the nucleic acid molecule; (3) a cell comprising the vector;
XX (4) detecting an isoform or a prion form of a prion polypeptide or a
XX polypeptide associated with a disease of protein aggregation, in a sample
XX above; (5) a solid support comprising a plurality of polypeptides described
XX with a disease of protein aggregation; (7) preparing a hybrid molecule
XX that specifically interacts with one conformer of a protein involved in
XX the disease mentioned above; and (8) an anti-idiotypic antibody that
XX specifically binds to an infectious form of a prion protein. (1) has
XX neuroprotective, neurotropic, antidiabetic, anticonvulsant,
XX cerebrotectic, antiparkinsonian, cytostatic, nephrotoxic, cardiac,
XX antiinflammatory and antiarteriosclerotic activities, and can be used in
XX gene therapy. The composition and methods of the present invention can be
XX used in diagnosing or treating diseases of protein aggregation or
XX conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
XX spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
XX Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
XX associated with chronic inflammatory disease, hereditary systemic
XX amyloidosis associated with autosomal dominant inheritance of variant
XX transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
XX Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma
XX cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
XX of thyroid, chronic renal failure, congestive heart failure, senile
XX cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
XX or familial amyloidosis. The present sequence is used in the
XX exemplification of the present invention.
XX
XX Sequence 42 AA;
XX
XX Query Match 100.0%; Score 86; DB 7; Length 42;
XX Best Local Similarity 100.0%; Pred. No. 4.1e-06;
XX Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NDWEDRYRNMNR 14
XX |||||
XX 2 NDWEDRYRNMNR 38
XX
XX RESULT 11
XX ABG94340
XX ID ABG94340 standard; protein; 124 AA.
XX

```

XX ABG94340;  
 AC 10-DEC-2002 (first entry)  
 XX DT  
 XX DE Mouse mPrt protein.  
 XX KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;  
 KW cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;  
 KW vaccine; infectious disease.  
 XX OS Mus sp.  
 XX PN WO200256905-A2.  
 XX PD 25-JUL-2002.  
 XX PF 21-JAN-2002; 2002WO-IB000166.  
 XX PR 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288549P.  
 PR 05-OCT-2001; 2001US-0326998P.  
 PR 07-NOV-2001; 2001US-0331045P.  
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 XX PI Renner W, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;  
 PI Ploesek C;  
 XX DR WPI; 2002-627351/67.  
 XX PT Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.  
 XX PS Disclosure; Page 438; 441pp; English.  
 XX XX  
 CC This invention relates to a novel ordered and repetitive antigen array  
 CC used in the production of vaccines for infectious diseases. The invention  
 CC also discloses a composition comprising a non-natural molecular scaffold  
 CC comprising a core particle selected from a core particle of a non-natural  
 CC origin and a core particle of natural origin and an organiser comprising  
 CC at least one first attachment site, where the organiser is connected to  
 CC the core particle by at least one covalent bond. Also disclosed is an  
 CC antigen or antigenic determinant with at least one second attachment  
 CC site, where the antigen or antigenic determinant is amyloid beta peptide  
 CC (A $\beta$ 1-42) or its fragment and where the second attachment site is  
 CC selected from an attachment site not naturally occurring with the antigen  
 CC or antigenic determinant and an attachment site naturally occurring with  
 CC the antigen or antigenic determinant, where the second attachment site is  
 CC capable of association through at least one non-peptide bond to the first  
 CC attachment site and where the antigen or antigenic determinant and the  
 CC scaffold interact through the association to form an ordered and  
 CC repetitive antigen array. The invention also comprises a coat protein  
 CC capable of forming a capsid which comprises mutant Obeta coat proteins  
 CC having an amino acid sequence selected from five amino acid sequences  
 CC fully defined in the specification. The compounds of the invention may  
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,  
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in  
 CC immunisation and as a vaccine. The present sequence represents a protein  
 CC sequence used to create the compositions of the invention  
 XX  
 SO Sequence 124 AA;  
 Query Match 100.0%; Score 86; DB 5; Length 124;  
 Best Local Similarity 100.0%; Pred. No. 1,3e-05;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 1 NDWEDRYRENMYR 14  
 23 NDWEDRYRENMYR 36

ABG80652  
 ID ABG80652 standard; protein; 124 AA.  
 XX AC  
 XX ABG80652;  
 XX DT 29-NOV-2002 (first entry)  
 XX DE Mouse truncated prion protein with C terminal cysteine containing linker.  
 XX KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;  
 KW molecular scaffold; amyloid beta; A $\beta$ 1-42; influenza; murein;  
 KW graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;  
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;  
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;  
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;  
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;  
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;  
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;  
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;  
 KW enterokinase; cysteine-containing linker.  
 XX OS Mus sp.  
 XX PN Synthetic.  
 XX PD WO200256907-A2.  
 XX PF 25-JUL-2002.  
 XX PR 21-JAN-2002; 2002WO-IB000168.  
 XX PR 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288549P.  
 PR 05-OCT-2001; 2001US-0326998P.  
 PR 07-NOV-2001; 2001US-0331045P.  
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PA (NOVS) NOVARTIS PHARMA AG.  
 PA (MAUR/) MAURER P.  
 PA (LECH/) LECHNER F.  
 PA (ORTM/) ORTMANN R.  
 PA (LUEB/) LUEBEND R.  
 PA (STAU/) STAUFENBIEL M.  
 XX PA (FREY/) FREY P.  
 XX PI Maurer P, Lechner F, Ortmann R, Luebend R, Staufenbiel M, Frey P;  
 PI Renner W, Bachmann M, Tissot A, Sebbel P, Ploesek C;  
 XX DR WPI; 2002-636514/68.  
 XX PT Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.  
 XX PS Example 7; Page 415; 418pp; English.  
 XX XX  
 CC The invention relates to a composition comprising: (a) a non-natural  
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a  
 CC core particle of a non-natural origin; and (2) a core particle of natural  
 CC origin; and (11) an organiser comprising at least one first attachment  
 CC site, where the organiser is connected to the core particle by at least  
 CC one covalent bond; (b) an antigen or antigenic determinant with at least  
 CC one second attachment site, where the antigen or antigenic determinant is  
 CC amyloid beta peptide (A $\beta$ 1-42) or its fragment, and where the second  
 CC attachment site is selected from: (1) an attachment site not naturally  
 CC occurring with the antigen or antigenic determinant; and (11) an  
 CC attachment site naturally occurring with the antigen or antigenic  
 CC determinant, where the second attachment site is capable of association  
 CC through at least one non-peptide bond to the first attachment site; and  
 CC where the antigen or antigenic determinant and the scaffold interact  
 CC through the association to form an ordered and repetitive antigen array.  
 CC Also included is a process for producing a non-naturally occurring  
 CC ordered and repetitive antigen array. The composition is used in  
 CC immunisation and as a vaccine for diseases such as influenza, graft  
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult

CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,  
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,  
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia  
 CC gravis, immunoproliferative disease lymphadenopathy,  
 CC angiodysplasia, immunoblastic lymphadenopathy,  
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,  
 CC osteoporosis and infectious diseases. The present sequence is a modified  
 CC antigen for use in the array of the invention. The antigen is modified to  
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-  
 CC containing N- or C-terminal linker peptide which serves as the attachment  
 CC point to a virus like particle or bacterial protein (the scaffold  
 CC protein)

CC Sequence 124 AA;

Query Match 100.0%; Score 86; DB 5; Length 124;  
 Best Local Similarity 100.0%; Pred. NO. 1.3e-05;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNMYR 14  
 |||||  
 DB 23 NDMEDRYRENNMYR 36

RESULT 13  
 ADD24200  
 ID ADD24200 standard; protein; 124 AA.

AC ADD24200;

DT 15-JAN-2004 (first entry)

DE mPrP-EK-Fc\* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;

KM first attachment site; antigen; antigenic determinant; prion protein;

KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

KM prion disease; Bovine Spongiform Encephalopathy; BSE;

KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc\*.

XX unidentified.

OS prion.

XX WO2003059386-A2.

PN 24-JUL-2003.

PD 17-JAN-2003; 2003WO-EP000460.

PF 18-JAN-2002; 2002US-00050902.

XX 21-JAN-2002; 2002WO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Bachmann M, Maurer P, Pellizzoli E, Renner WA;

XX WPL 2003-598483/56.

XX A vaccine composition for preventing or treating prion diseases (e.g.

XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-

XX phage) and at least one prion protein or peptide bound to the virus-like  
 CC particle.

XX Example 13; SEQ ID NO 93; 246pp; English.

CC composition is useful as a medicament or in manufacturing a medicament  
 CC for the treatment or prevention of prion diseases. The prion diseases may  
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
 CC Disease. The present sequence is the amino acid sequence of the cleaved  
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc\*)  
 CC which was used during the exemplification of the invention.

CC Sequence 124 AA;

Query Match 100.0%; Score 86; DB 7; Length 124;  
 Best Local Similarity 100.0%; Pred. NO. 1.3e-05;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNMYR 14  
 |||||  
 DB 23 NDMEDRYRENNMYR 36

RESULT 14  
 AAB07316  
 ID AAB07316 standard; protein; 208 AA.

AC AAB07316;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

XX Mouse; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Mus sp.

XX Location/Qualifiers

FT Key 37..68  
 FT Region /note= "Repeat region consisting of tandem repeats of  
 FT repeat unit: FHGGGMCQ (AAB07319)"

FT Disulfide-bond 156..191

FT Modified-site 208

XX /note= "C-terminal phospho-inositol glycolipid membrane  
 XX anchor (-GPI)"

PN WO200029850-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99WO-FI000897.

PR 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

PA (BBSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPL 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of  
 XX transmissible spongiform encephalopathies in bovines.

XX Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,  
 XX insoluble isoform is implicated in the pathogenesis of transmissible  
 XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine  
 XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)  
 XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of  
 XX this protein in body fluid or tissue samples may be measured by an assay  
 XX of the present invention, in which a PrP epitope is captured by an  
 XX antibody, which is then detected. The presence of PrP indicates TSE. PrP  
 XX epitopes (AAB07320-B07326) are derived from the protease resistant core  
 CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;  
SQ

Query Match 100.0%; Score 86; DB 3; Length 208;  
Best Local Similarity 100.0%; Pred. No. 2.3e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
DB 120 NDWEDRYRYENMYR 133

# RESULT 15

AAB07327  
ID AAB07327 standard; protein; 208 AA.

AC AAB07327;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

KM Mouse; prion protein; transmissible spongiform encephalopathy;  
KM bovine spongiform encephalopathy; TSE diagnosis; PrP.

OS Mus sp.

Key Location/Qualifiers  
37..68

FT Region /note="Repeat region consisting of tandem repeats of  
repeat unit: PHGGGWGQ (AAB07319)"

FT Disulfide-bond 156..191

FT Modified-site 208 /note="C-terminal phospho-inositol glycolipid membrane  
anchor (-GPI)"

FT MO200029849-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99MO-F1000896.

PR 17-NOV-1998; 98PI-00002480.

PA (WALL-) WALLAC OY.  
(BBSR-) BBSRC OFFICE.

PI Hope J, Barnard GJR, Birkett CR;

DR WPI; 2000-399778/34.

PT New immunosay for prion protein, used for determination of  
transmissible spongiform encephalopathies in mammals, comprises specific  
capture antibody.

PS Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.  
CC Conversion of the normal cellular form of PrP into an aggregated,  
CC insoluble isoform is implicated in the pathogenesis of transmissible  
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine  
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)  
CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of  
CC this protein in body fluid or tissue samples may be measured by an assay  
CC of the present invention, in which a PrP epitope is captured by an  
CC antibody, which is then detected. The presence of PrP indicates TSE. PrP  
CC epitopes (AAB07320-B07326) are derived from the protease resistant core  
CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;  
SQ

Query Match 100.0%; Score 86; DB 3; Length 208;  
Best Local Similarity 100.0%; Pred. No. 2.3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
DB 120 NDWEDRYRYENMYR 133

Search completed: April 30, 2004, 15:28:53  
Job time : 44 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 9.58333 Seconds  
(without alignments) 108.668 Million cell updates/sec

Title: US-09-603-832-7  
Perfect score: 103  
Sequence: 1 ETDVKMERYEOMCTQYQ 20

Scoring table: BIOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues  
Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum March 0%  
Maximum March 100%  
Listing first 45 summaries

Database : SwissProt\_42:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	103	100.0	254	1	PRIO_CRIGR
2	103	100.0	254	1	PRIO_CRIMI
3	103	100.0	254	1	PRIO_MOUSE
4	103	100.0	254	1	PRIO_RAT
5	103	100.0	254	1	PRIO_SIGHI
6	102	99.0	238	1	PRIO_THEGE
7	102	99.0	255	1	PRIO_CAMDR
8	101	98.1	255	1	PRIO_CANPA
9	101	98.1	256	1	PRIO_CERBL
10	101	98.1	256	1	PRIO_ODOHE
11	101	98.1	256	1	PRP2_BOVIN
12	101	98.1	256	1	PRP2_TRAST
13	101	98.1	256	1	PRIO_BOVIN
14	101	98.1	254	1	PRP1_TRAST
15	99	96.1	232	1	PRIO_ATRGE
16	99	96.1	238	1	PRIO_CERYT
17	99	96.1	241	1	PRIO_CALMO
18	99	96.1	241	1	PRIO_MANSP
19	99	96.1	245	1	PRIO_CERAE
20	99	96.1	246	1	PRIO_CERMO
21	99	96.1	246	1	PRIO_CERPA
22	99	96.1	246	1	PRIO_CERTO
23	99	96.1	252	1	PRIO_ATEPA
24	99	96.1	252	1	PRIO_CALCA
25	99	96.1	252	1	PRIO_CEBAP
26	99	96.1	253	1	PRIO_COLGU
27	99	96.1	253	1	PRIO_GORGO
28	99	96.1	253	1	PRIO_HUMAN
29	99	96.1	253	1	PRIO_MACRA
30	99	96.1	253	1	PRIO_PANTR
31	99	96.1	253	1	PRIO_PONRY
32	99	96.1	253	1	PRIO_PPRER
33	99	96.1	260	1	PRIO_SAISC

## ALIGNMENTS

RESULT 1	PRIO_CRIGR	STANDARD	PRT	254 AA
AC	060506			
DT	15-JUL-1998 (Rel. 36, Created)			
DT	15-JUL-1998 (Rel. 36, Last sequence update)			
DT	15-MAR-2004 (Rel. 43, Last annotation update)			
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).			
GN	Prnp.			
OS	Cricetus griseus (Chinese hamster)			
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Cricetulus.			
OX	NCBI_TaxId=10029;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RC	TISSUE=Brain;			
RX	MEDLINE=90158578; PubMed=2406562;			
RA	Lowenstein D.H., Butler D.A., McKinley M.P.,			
RA	DeArmond S.J., Prusiner S.B.;			
RT	"Three hamster species with different scrapie incubation times and			
RT	neuropathological features encode distinct prion proteins.";			
RL	Mol. Cell. Biol. 10:1153-1163(1990).			
CC	- FUNCTION: The function of Prp is not known. Prp is encoded in the			
CC	host genome and is expressed both in normal and infected cells.			
CC	- SUBUNIT: Prp has a tendency to aggregate yielding polymers called			
CC	"rods".			
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.			
CC	- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS			
CC	INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,			
CC	CRETZZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME			
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),			
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.			
CC	- SIMILARITY: Belongs to the prion family.			
CC	- This SWISS-PROT entry is copyright. It is produced through a collaboration			
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -			
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CC	use by non-profit institutions as long as its content is in no way			
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CC	entities requires a license agreement (See <a href="http://www.isb-sib.ch/announce/">http://www.isb-sib.ch/announce/</a>			
CC	or send an email to <a href="mailto:license@sib-sib.ch">license@sib-sib.ch</a> ).			
DR	EMBL; M33958; AAA37013.1; -			
DR	PIR; A34759; A34759.			
DR	HSSP; P04925; 1AG2.			
DR	InterPro; IPR000817; Prion.			
DR	Pfam; PF00377; prion.1.			
DR	Pfam; PF03991; Prion octapep; 6.			
DR	PRINTS; PR00341; PRION.			
DR	SMART; SM00157; prp.1.			
DR	PROSITE; PS00291; PRION_1; 1.			
DR	PROSITE; PS00706; PRION_2; 1.			
DR	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.			
FT	SIGNAL 1 22			
FT	CHAIN 23 231			
FT	MAJOR PRION PROTEIN.			



FT PROPEP 232 254 REMOVED IN MATURE FORM.  
 FT LIPID 231 231 GPI-anchor amidated serine.  
 FT DOMAIN 90 231 PRP27-30 (PROTEASE RESISTANT CORE).  
 FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (BY SIMILARITY).  
 FT CARBOHYD 197 197 N-LINKED (GLCNAC. . .) (BY SIMILARITY).  
 FT DISULFID 179 197 BY SIMILARITY.  
 FT DOMAIN 51 91 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-  
 FT REPEAT 51 59 0.  
 FT REPEAT 60 67 1.  
 FT REPEAT 68 75 2.  
 FT REPEAT 76 83 3.  
 FT REPEAT 84 91 4.  
 FT REPEAT 84 91 5.  
 SQ SEQUENCE 254 AA; 27623 MW; 5.6299CA00EB8607D CRC64;  
 Query Match 100.0%; Score 103; DB 1; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVGMERVVEQMCVTQYO 20  
 DB 200 ETDVGMERVVEQMCVTQYO 219  
 RESULT 2  
 PRT: 254 AA.  
 ID PRTIO CRIMI STANDARD; PRT: 254 AA.  
 AC Q60468;  
 DT 15-JUL-1998 (Rel. 36, Created)  
 DT 15-JUL-1998 (Rel. 36, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).  
 GN PRNP.  
 OS Cricetus migratorius (Armenian hamster).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;  
 CC Cricetulus.  
 NCBI\_TaxID=10032;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RX MEDLINE=90158578; PubMed=2406562;  
 RA Lovenstein D.H., Butler D.A., Westaway D., McKinley M.P.,  
 RA DeArmond S.J., Prusiner S.B.;  
 RT "Three hamster species with different scrapie incubation times and  
 RT neuropathological features encode distinct prion proteins.";  
 RL Mol. Cell. Biol. 10:1153-1163(1990).  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "folds".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
 CC -----  
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 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
 CC -----  
 CC EMBL: M33959; AAA37014.1; -;  
 DR HSSP: P04925; IAG2  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion; 1.  
 DR Pfam: PF03991; Prion\_octapep; 6.  
 DR PRINTS: PR00341; PRION.

DR SMART; SM00157; Prp; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 FT SIGNAL 1 22 BY SIMILARITY.  
 FT CHAIN 23 231 MAJOR PRION PROTEIN.  
 FT PROPEP 232 254 REMOVED IN MATURE FORM.  
 FT LIPID 231 231 GPI-anchor amidated serine.  
 FT DOMAIN 90 231 PRP27-30 (PROTEASE RESISTANT CORE).  
 FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (BY SIMILARITY).  
 FT CARBOHYD 197 197 N-LINKED (GLCNAC. . .) (BY SIMILARITY).  
 FT DISULFID 179 214 BY SIMILARITY.  
 FT DOMAIN 51 91 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-  
 FT REPEAT 51 59 0.  
 FT REPEAT 60 67 1.  
 FT REPEAT 68 75 2.  
 FT REPEAT 76 83 3.  
 FT REPEAT 84 91 4.  
 FT REPEAT 84 91 5.  
 SQ SEQUENCE 254 AA; 27855 MW; 7B963FC6F779D0F CRC64;  
 Query Match 100.0%; Score 103; DB 1; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 1.5e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVGMERVVEQMCVTQYO 20  
 DB 200 ETDVGMERVVEQMCVTQYO 219  
 RESULT 3  
 PRT: 254 AA.  
 ID PRTIO MOUSE STANDARD; PRT: 254 AA.  
 AC P04935;  
 DT 13-AUG-1987 (Rel. 05, Created)  
 DT 01-JAN-1990 (Rel. 13, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).  
 GN PRNP OR PRN-P.  
 GN Mus musculus (Mouse).  
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 NCBI\_TaxID=10090;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=NZW, and I/LN1;  
 RX MEDLINE=86052869; PubMed=2890436;  
 RA Westaway D., Goodman P.A., Miranda C.A., McKinley M.P., Carlson G.A.,  
 RA Prusiner S.B.;  
 RT "Distinct prion proteins in short and long scrapie incubation period  
 RT mice.";  
 RL Cell 51:651-662(1987).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=8613583; PubMed=3462700;  
 RA Loch C., Chesebro B., Race R., Keith J.M.;  
 RT "Molecular cloning and complete sequence of prion protein cDNA from  
 RT mouse brain infected with the scrapie agent.";  
 RL Eur. J. Biochem. 172:271-277(1988).  
 RN [3]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=8816695; PubMed=2894984;  
 RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;  
 RT "Molecular pathology of scrapie-associated fibril protein (Prp) in  
 RT mouse brain affected by the M87 strain of scrapie.";  
 RL Eur. J. Biochem. 172:271-277(1988).  
 RN [4]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=NZW; TISSUE=Brain;  
 RX MEDLINE=99018115; PubMed=9799790;  
 RA Lee I.Y., Westaway D., Smit A.F.A., Wang K., Seto J., Chen L.,  
 RA Acharya C., Ankener M., Baekin D., Cooper C., Yao H., Prusiner S.B.,  
 RA Hood L.E.;

RT "Complete genomic sequence and analysis of the prion protein gene  
RT region from three mammalian species.";  
RT Genome Res. 8:1022-1037(1998).  
RN [5]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22388257; PubMed=12477932;  
RA Kraussberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,  
RA Kraussberg R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,  
RA Altschul S.F., Zeeberg B., Butler K.H., Schaefer C.F., Bhat N.K.,  
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,  
RA Diatchenko L., Marusik A., Farmer A.A., Rubin G.M., Hong L.,  
RA Brownstein M.J., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,  
RA Raba S.S., Loguclano N.A., Peters G.J., Abramson R.D., Mullany S.J.,  
RA Roark S.A., McKernan P.T., McKernan K.J., Malek J.A., Guaratone P.H.,  
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.O., Hulyk S.W.,  
RA Vallatton D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
RA Fahy J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,  
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,  
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.E.,  
RA Schnerch A., Schein J.E., Jones S.J.W., Maiza M.A.;  
RT "Generation and initial analysis of more than 15,000 full-length  
RT human and mouse cDNA sequences.";  
RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).  
RN [6]  
RP SEQUENCE OF 87-164 FROM N.A.  
RX MEDLINE=86213844; PubMed=3923361;  
RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,  
RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.;  
RT "Identification of scrapie prion protein-specific mRNA in scrapie-  
RT infected and uninfected brain.";  
RT Nature 315:331-333(1985).  
RN [7]  
RP STRUCTURE BY NMR OF 120-230.  
RX MEDLINE=96317593; PubMed=8700211;  
RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,  
RA Wuehrlich K.;  
RT "NMR structure of the mouse prion protein domain PrP(121-321).";  
RT Nature 382:180-182(1996).  
RN [8]  
RP STRUCTURE BY NMR OF 23-231.  
RX MEDLINE=97424376; PubMed=9280298;  
RA Riek R., Hornemann S., Wider G., Glockshuber R., Wuehrlich K.;  
RT "NMR characterization of the full-length recombinant murine prion  
RT protein, mPrP(23-231).";  
RT FEBS Lett. 413:282-288(1997).  
RN [9]  
RP HYDROXYLATION OF PRO-44.  
RX MEDLINE=20490364; PubMed=11032800;  
RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,  
RA Bocking S.P., Rile A.G.O., Bennett A.D., Hope J.;  
RT "Post-translational hydroxylation at the N-terminus of the prion  
RT protein reveals presence of PrP structure in vivo.";  
RT EMBO J. 19:5324-5331(2000).  
RN [10]  
RP FUNCTION: The function of PrP is not known. PrP is encoded in the  
RN host genome and is expressed both in normal and infected cells.  
RN SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
RN "colds".  
RN -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
RN -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
RN INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
RN CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
RN (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
RN TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
RN -1- SIMILARITY: Belongs to the prion family.  
RN -----  
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CC or send an email to [license@ebi-sib.ch](mailto:license@ebi-sib.ch)).  
CC -----  
DR EMBL; M18070; AAA39997.1; -;  
DR EMBL; M18071; AAA39998.1; -;  
DR EMBL; M13685; AAA39996.1; -;  
DR EMBL; U29186; AAC02804.1; -;  
DR EMBL; BC006703; AAH06703.1; -;  
DR EMBL; M30384; AAA39999.1; -;  
DR PIR; A29669; A23544.  
DR PIR; A29669; A23544.  
DR MGD; IAG2; 08-OCT-97.  
DR GO; GO:0005783; C:Endoplasmic reticulum; IDA.  
DR GO; GO:0005794; C:Golgi apparatus; IDA.  
DR GO; GO:0005886; C:Plasma membrane; IDA.  
DR GO; GO:0005507; F:copper ion binding; IDA.  
DR GO; GO:0006979; P:response to oxidative stress; IDA.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; prion; 1.  
DR Pfam; PF00391; Prion octapep; 6.  
DR PRINTS; PR00341; PRION.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Hydroxylation;  
KW Polymorphism; 3D-structure; Lipoprotein.  
FT SIGNAL 1 22  
FT CHAIN 23 230  
FT PROPEP 231 254  
FT MOD\_RES 44 44  
FT LIPID 230 230  
FT CARBOHYD 180 180  
FT CARBOHYD 196 196  
FT DISULFID 178 213  
FT DOMAIN 51 90  
FT FT 51 58  
FT REPEAT 51 58  
FT REPEAT 59 66  
FT REPEAT 67 74  
FT REPEAT 75 82  
FT REPEAT 83 90  
FT VARIANT 108 108  
FT VARIANT 189 189  
FT CONFLICT 133 133  
FT TURN 124 126  
FT STRAND 128 129  
FT STRAND 143 143  
FT HELIX 153 155  
FT TURN 161 162  
FT STRAND 171 191  
FT HELIX 192 194  
FT TURN 198 221  
FT HELIX 222 224  
FT TURN 224 224  
SQ SEQUENCE 254 AA; 27977 MW; D5331E6321826CCO CRC64;  
Query Match 100.0%; Score 103; DB 1; Length 254;  
Best local Similarity 100.0%; Pred. No. 1.5e-09;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 ETDVQMERVVEQKCTOYQ 20  
DB 199 ETDVQMERVVEQKCTOYQ 218  
RESULT 4  
PROT RAT STANDARD; PRT; 254 AA.  
AC P13852;  
DT 01-JAN-1990 (Rel. 13; Created)  
DT 01-NOV-1997 (Rel. 35; Last sequence update)  
DT 15-MAR-2004 (Rel. 43; Last annotation update)

DE	Major prion protein precursor (PrP).	
GN	PrP or Prn.	
OS	Rattus norvegicus (Rat).	
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.	
OX	NCBI_TaxID=10116;	
RN	[1]	
RP	SEQUENCE FROM N.A.	
RC	STRAIN=Zitter, and SJ/D; TISSUE=Liver;	
RX	MEDLINE=9703369; PubMed=8879116;	
RA	Sasaki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;	
RT	"Three-exon structure of the gene encoding the rat prion protein and	
RT	its expression in tissues.";	
RL	Virus Genes 12:15-20(1996).	
RN	[3]	
RP	SEQUENCE OF 29-254 FROM N.A.	
RX	MEDLINE=88037055; PubMed=2889848;	
RA	Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button T.D.,	
RA	Clawson G.A.;	
RT	"Cloning of rat 'prion-related protein' cDNA.";	
RL	Lab. Invest. 57:370-374(1987).	
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the	
CC	host genome and is expressed both in normal and infected cells.	
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called	
CC	"rods".	
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.	
CC	-1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS	
CC	INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS Kuru,	
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME	
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),	
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.	
CC	-1- SIMILARITY: Belongs to the prion family.	
CC	-----	
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CC	or send an email to <a href="mailto:license@isb-sib.ch">license@isb-sib.ch</a> ).	
CC	-----	
DR	EMBL; S69654; AA30728.2; -	
DR	EMBL; D50093; BA08790.1; -	
DR	EMBL; M20313; AAA1947.1; -	
DR	PIR; A53892; A53892.	
DR	HSSP; P04925; 1A62.	
DR	InterPro; IPR000817; Prion.	
DR	Pfam; PF003377; prion.1	
DR	Pfam; PF03991; PrionOctapep; 6.	
DR	PRINTS; PRO0341; PRION.	
DR	SMART; SM00157; PRP; 1.	
DR	PROSITE; PS00291; PRION_1; 1.	
DR	PROSITE; PS00706; PRION_2; 1.	
KW	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.	
FT	CHAIN	1
FT	FT	28
FT	PROPEP	231
FT	FT	254
FT	LIPID	231
FT	FT	231
FT	CARBOHYD	181
FT	CARBOHYD	197
FT	DISULFID	179
FT	FT	214
FT	DOMAIN	51
FT	FT	91
Q	5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-	

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FT REPEAT 51 59 1.
FT REPEAT 67 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 91 5.
SQ SEQUENCE 254 AA; 27804 MW; 28F424D13BEFA2C6 CRC64;

Query March 100.0%; Score 103; DB 1; Length 254;
Match Local Similarity 100.0%; Pred. No. 1.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDYKMERVVEQWCVTQYQ 20
Db 200 ETDYKMERVVEQWCVTQYQ 219

RESULT 5
PRIO_SIGHI STANDARD; PR7; 254 AA.
AC 092073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PRNP OR PrP.
OS Sigmodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Cranialia; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
OX (1)
RN SEQUENCE FROM N.A.
RP TISSUE=Brain;
RC MEDLINE=99303687; PubMed=10373359;
RA Wolfner F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.,
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rod"
CC -1- STRUCTURAL LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CEUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL; AF117325; AADI19996.1; -
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; prion; 1
CC Pfam; PF03991; prionoctapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PrP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein, GPI-anchor; Repeat; Signal.
FT CHAIN 1 22 BY SIMILARITY
FT 23 254 MAJOR PRION PROTEIN.
FT 51 91 5 X 8 AA TANDEN REPEATS OF P-H-G-G-G-W-G-
FT Q.

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FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 91 5.
FT DISULFID 179 214 BY SIMILARITY.
FT CARBOHYD 181 181 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 197 197 N-LINKED (GLCNAC. .) (POTENTIAL).
SQ SEQUENCE 254 AA; 27874 MW; 50C464D5165572DF CRC64;

Query Match 100.0%; Score 103; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.5e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAMERVVEQMCVTQYQ 20
DB 200 ETDVAMERVVEQMCVTQYQ 219

RESULT 6
PRIO_THESG STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PrP OR PrP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyil A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jacob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U75383; AAB50630.1; -
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion-octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 15
FT CHAIN 16 >238 MAJOR PRION PROTEIN.
FT DISULFID 164 199 BY SIMILARITY.
FT CARBOHYD 166 166 N-LINKED (GLCNAC. .) (POTENTIAL).
FT CARBOHYD 182 182 N-LINKED (GLCNAC. .) (POTENTIAL).

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FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 76 76 4.
FT NON TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 99.0%; Score 102; DB 1; Length 238;
Best Local Similarity 95.0%; Pred. No. 2e-09;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVAMERVVEQMCVTQYQ 20
DB 185 ETDVAMERVVEQMCVTQYQ 204

RESULT 7
PRIO_CAMDR STANDARD; PRT; 255 AA.
AC P79141;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP).
GN PrP OR PrP.
OS Camelus dromedarius (Dromedary) (Arabian camel).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
OX NCBI_Taxid=96838;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=96019099; PubMed=9358067;
RA Kaluz S., Kaluzova M., Flint A.P.F.;
RL "Sequencing analysis of prion genes from red deer and camel.";
RL Gene 199:283-286(1997).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jacob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; Y09760; CAA70901.1; -
DR HSSP; P10279; IDMY.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion-octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24
FT CHAIN 25 255 MAJOR PRION PROTEIN.
FT CHAIN 54 94 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 Q.
FT REPEAT 63 70 2.

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FT REPEAT 71 78 3.
FT REPEAT 79 86 4.
FT REPEAT 87 94 5.
FT DISULFID 182 217 BY SIMILARITY.
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).
SQ SEQUENCE 255 AA; 27595 MW; FABB2BFA333E494 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 1; Length 255;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQWCVTOYQ 20
Db 203 ETDVQMERVVEQWCVTOYQ 222

RESULT 8
PRIO CANFA STANDARD; PRT; 255 AA.
AC 046501:
DT 15-JUL-1999 (Rel. 38, Created)
DT 15-JUL-1999 (Rel. 38, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp).
GN PRNP OR PRP.
OS Canis familiaris (Dog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9615;
RN [1]
RP SEQUENCE FROM N.A.
RA Rohwer R.G., Edelman D.;
RT Submitted (SEP-1997) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@sib-sib.ch).
CC -----
DR EMBL AF022714: AAB94585.1;
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion.1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
FT SIGNAL 1 24
FT CHAIN 25 255 MAJOR PRION PROTEIN.
FT DOMAIN 54 94 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 54 62 1.
FT REPEAT 63 70 2.
FT REPEAT 71 78 3.
FT REPEAT 79 86 4.
FT REPEAT 87 94 5.

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FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 199 199 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DISULFID 182 216 BY SIMILARITY.
SQ SEQUENCE 255 AA; 27704 MW; 70E80411BD6B1F63 CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 1; Length 255;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVQMERVVEQWCVTOYQ 20
Db 202 ETDVQMERVVEQWCVTOYQ 221

RESULT 9
PRIO CEREL STANDARD; PRT; 256 AA.
AC P79142; O62669;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp).
GN PRNP OR PRP.
OS Cervus elaphus (Red deer), and
OS Cervus elaphus nelsoni (American elk).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;
OC Cervidae; Cervinae; Cervus.
OX NCBI_TaxID=9860; 9864;
RN [1]
RP SEQUENCE FROM N.A.
RA SPECIES=C. elaphus; TISSUE=Blood;
RX MEDLINE=98019099; PubMed=9358067;
RA Kaluz S., Kaluzova M., Flint A.P.F.;
RT "Sequencing analysis of prion genes from red deer and camel.";
RL Gene 199:283-286 (1997).
RN [2]
RP SEQUENCE FROM N.A.
RA SPECIES=C. nelsoni; TISSUE=Brain;
RX MEDLINE=98281723; PubMed=9620413;
RA O'Rourke K.I., Baszler T.V., Miller J.M., Spraker T.R.,
RA Sadler-Rigsbyman I., Knowles D.P.;
RT "Monoclonal antibody F89/160.1.5 defines a conserved epitope on the
RT ruminant prion protein.";
RL J. Clin. Microbiol. 36:1750-1755 (1998).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: Y09761; CAAT0902.1;
DR EMBL: AF016227; AAC12860.2;
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion.1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.

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DR SMART: SM00157; PRP: 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24 BY SIMILARITY.  
 FT CHAIN 25 256 MAJOR PRION PROTEIN.  
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DISULFID 182 217 BY SIMILARITY.  
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-  
 Q.  
 FT REPEAT 54 62 1.  
 FT REPEAT 63 70 2.  
 FT REPEAT 71 78 3.  
 FT REPEAT 79 86 4.  
 FT REPEAT 87 95 5.  
 SQ SEQUENCE 256 AA; 27935 MW; E54EB121DE02E1E5 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;  
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVKKMERVVEQNCITQYQ 20  
 DB 203 ETDIKMERVVEQNCITQYQ 222

RESULT 10  
 PRIO\_ODOHE STANDARD; PRT; 256 AA.  
 AC P47852;  
 DT 01-FEB-1996 (Rel. 33, Created)  
 DT 01-FEB-1996 (Rel. 33, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (PrP).  
 GN PRNP.  
 OS Odocoileus hemionus (Mule deer) (Black-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;  
 OC Cervidae; Odocoileinae; Odocoileus.  
 CX NCBI\_TaxID=96872;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=97393774; PubMed=9250209;  
 RA Cervenakova L., Rohwer R., Williams S., Brown P., Gajdusek D.C.;  
 RT "High sequence homology of the PrP gene in mule deer and Rocky Mountain elk.";  
 RL Lancet 350:219-220(1997).  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor (by similarity).  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KNOWN AS CHRONIC WASTING DISEASE (CMD).  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC EMBL: U25965; AAA68941.1; -  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion\_1.  
 DR PIR: PF03991; Prion\_occaped; 5.  
 DR PRINTS: PR00341; PRION.

DR SMART: SM00157; PRP: 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24 BY SIMILARITY.  
 FT CHAIN 25 256 MAJOR PRION PROTEIN.  
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DISULFID 182 217 BY SIMILARITY.  
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-G-  
 Q.  
 FT REPEAT 54 62 1.  
 FT REPEAT 63 70 2.  
 FT REPEAT 71 78 3.  
 FT REPEAT 79 86 4.  
 FT REPEAT 87 95 5.  
 SQ SEQUENCE 256 AA; 27961 MW; E98EB121C302FD36 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;  
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVKKMERVVEQNCITQYQ 20  
 DB 203 ETDIKMERVVEQNCITQYQ 222

RESULT 11  
 PRP2\_BOVIN STANDARD; PRT; 256 AA.  
 AC Q01880;  
 DT 01-JUN-1994 (Rel. 29, Created)  
 DT 01-JUN-1994 (Rel. 29, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein 2 precursor (PrP) (Major scrapie-associated fibril protein 2).  
 GN PrP.  
 OS Bos taurus (Bovine).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Bovinae; Bos.  
 CX NCBI\_TaxID=9913;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX TISSUE=Brain;  
 RX MEDLINE=93118243; PubMed=1362024;  
 RA Yoshimizu J., Iinuma T., Ishiguro N., Horuchi M., Imamura M., Shingawa M.;  
 RT "Comparative sequence analysis and expression of bovine PrP gene in mouse I-929 cells.";  
 RL Virus Genes 6:343-356(1992).  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC EMBL: D10614; BAA01469.1; -  
 DR PIR: D10268; J00268.  
 DR HSSP: P10279; IDWY.

DR InterPro: IPR001610; PAC.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion\_1.  
 DR Pfam: PF03991; Prion\_octapep; 5.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00086; PAC; 1.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24  
 FT CHAIN 1 256  
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DISULFID 182 217 BY SIMILARITY.  
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT REPEAT 54 62 0.  
 FT REPEAT 63 70 1.  
 FT REPEAT 71 78 2.  
 FT REPEAT 79 86 3.  
 FT REPEAT 87 95 4.  
 FT REPEAT 95 95 5.  
 SQ SEQUENCE 256 AA; 27880 MW; 0D969FFD9033B30 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;  
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ETDYKMERVVEQWCVTOYQ 20  
 DB 203 ETDIKMERVVEQWCVTOYQ 222

RESULT 12  
 PRP2 TRAST STANDARD; PRT; 256 AA.  
 ID PRP2 TRAST STANDARD; PRT; 256 AA.  
 AC P40273;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril protein 2).  
 DE Trielaphus streptoceros (Greater kudu).  
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Tragelaphus.  
 OC NCB1\_TaxID=9946;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;  
 RL Submitted (Aug-1993) to the EMBL/GenBank/DBJ databases.  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CRUZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC EMBL; X74759; CAA52775.1; -

DR HSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion\_1.  
 DR Pfam: PF03991; Prion\_octapep; 5.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT SIGNAL 1 24  
 FT CHAIN 1 256  
 FT CARBOHYD 184 184 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 200 200 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DISULFID 182 217 BY SIMILARITY.  
 FT DOMAIN 54 95 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
 FT REPEAT 54 62 0.  
 FT REPEAT 63 70 1.  
 FT REPEAT 71 78 2.  
 FT REPEAT 79 86 3.  
 FT REPEAT 87 95 4.  
 FT REPEAT 95 95 5.  
 SQ SEQUENCE 256 AA; 28050 MW; D4D02CDBFC918743 CRC64;

Query Match 98.1%; Score 101; DB 1; Length 256;  
 Best Local Similarity 90.0%; Pred. No. 3.1e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Cy 1 ETDYKMERVVEQWCVTOYQ 20  
 DB 203 ETDIKMERVVEQWCVTOYQ 222

RESULT 13  
 PRIO BOVIN STANDARD; PRT; 264 AA.  
 ID PRIO BOVIN STANDARD; PRT; 264 AA.  
 AC P10279;  
 DT 01-MAR-1989 (Rel. 10, Created)  
 DT 01-NOV-1991 (Rel. 20, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril protein 1).  
 DE PRNP OR PrP.  
 GN PRNP OR PrP.  
 OS Bos taurus (Bovine).  
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Bos.  
 OC NCB1\_TaxID=9913;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=Holstein-Friesian;  
 RX MEDLINE=91116314; PubMed=1671225;  
 RA Goldmann W., Hunter N., Martin T., Dawson M., Hope J.;  
 RT "Different forms of the bovine PrP gene have five or six copies of a short, G-C-rich element within the protein-coding exon";  
 RL J. Gen. Virol. 72:201-204 (1991).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RX MEDLINE=93118243; PubMed=1362024;  
 RA Yoshimuro J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M., Shinagawa M.;  
 RT "Comparative sequence analysis and expression of bovine PrP gene in mouse L-929 cells";  
 RL Virus Genes 6:343-356 (1992).  
 RN [3]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=93179783; PubMed=8440932;  
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H., Tzabopoulos A., Gabriel J.W., Wells G.A., Wilesmith J.W., Bradley R.;  
 RT "Immunologic and molecular biologic studies of prion proteins in bovine spongiform encephalopathy";  
 RL J. Infect. Dis. 167:602-613 (1993).  
 RN [4]

RP SEQUENCE FROM N.A.  
 RC STRAIN=Holstein-Friesian; Tissue=Brain;  
 RA Horiuchi M.;  
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.  
 RN  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=Jersey;  
 RA MEDLINE=21422903; PubMed=11531705;  
 RX Hills D., Comincini S., Schlaepfer J., Dolf G., Ferretti L.,  
 RA Williams J.L.;  
 RT "Complete genomic sequence of the bovine prion gene (PRNP) and  
 RT polymorphism in its promoter region.";  
 RL Anim. Genet. 32:231-232 (2001).  
 RN  
 RP SEQUENCE FROM N.A.  
 RC STRAIN=Korean;  
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.;  
 RT "Nucleotide sequence of PrP cDNA in Korean cattle.";  
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.  
 RN  
 RP SEQUENCE OF 1-15 FROM N.A.  
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.;  
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.  
 RN  
 RP SEQUENCE OF 25-36.  
 RX MEDLINE=89057122; PubMed=2904126;  
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,  
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;  
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-  
 RT associated protein.";  
 RL Nature 336:390-392 (1988).  
 RN  
 RP STRUCTURE BY NMR OF 132-241.  
 RX MEDLINE=20359707; PubMed=10899999;  
 RA Lopez Garcia F., Zahn R., Riek R., Muehlich K.;  
 RT "NMR structure of the bovine prion protein.";  
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339 (2000).  
 CC  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC  
 CC -1- SIMILARITY: Belongs to the prion family.  
 CC  
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 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
 CC  
 CC -----  
 CC EMBL; X55882; CA39368.1; -  
 DR EMBL; D10612; BAA01467.1; -  
 DR EMBL; D10613; BAA01468.1; -  
 DR EMBL; S55629; AAB25614.1; -  
 DR EMBL; AB001468; BAA19283.1; -  
 DR EMBL; AJ298878; CAC37367.1; -  
 DR EMBL; AF517842; AAM66709.1; -  
 DR EMBL; D26151; BAA05138.1; -  
 DR PIR; A54330; A54330.  
 DR PDB; 1DMY; 26-FEB-02.  
 DR PDB; 1DMZ; 26-FEB-02.  
 DR PDB; 1DX0; 26-FEB-02.  
 DR PDB; 1DX1; 26-FEB-02.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 6.

DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Polymorphism;  
 KW 3D-structure.  
 FT SIGNAL 1 24  
 FT CHAIN 25 264  
 FT CARBOHYD 192 192  
 FT CARBOHYD 208 208  
 FT DISULFID 190 225  
 FT DOMAIN 54 103  
 FT FT  
 FT REPEAT 54 62  
 FT REPEAT 63 70  
 FT REPEAT 71 78  
 FT REPEAT 79 86  
 FT REPEAT 87 94  
 FT REPEAT 95 103  
 FT VARIANT 71 78  
 FT CONFLICT 218 218  
 FT HELIX 136 138  
 FT STRAND 140 141  
 FT HELIX 155 162  
 FT TURN 163 164  
 FT HELIX 165 167  
 FT STRAND 173 174  
 FT HELIX 184 203  
 FT TURN 204 206  
 FT HELIX 211 237  
 SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;  
 Query Match 98.1%; Score 101; DB 1; Length 264;  
 Best Local Similarity 90.0%; Pred. No. 3.2e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;  
 QY 1 ETDVDMGRVVEQMCVTQYQ 20  
 Db 211 ETDVDMGRVVEQMCVTQYQ 230  
 RESULT 14  
 ID PRP1 TRAST STANDARD; PRT; 264 AA.  
 AC P40242;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last annotation update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril  
 DE protein 1).  
 OS Trachelaphus strepsireos (Greater kudu).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Bovinae; Trachelaphus.  
 OX NCBI\_TaxID=9946;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA Martin T.C., Hughes S.L., Hughes K.J., Dawson M.;  
 RL Submitted (AUG-1993) to the EMBL/GenBank/DBJ databases.  
 CC  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells  
 CC  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC  
 CC -1- SIMILARITY: Belongs to the prion family.  
 CC  
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CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).

DR EMBL: X74771; CAAS2781.1; -  
DR PIR: S37137; S37137.  
DR HSSP: P10279; IDMY.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; Prion; 1.  
DR Pfam: PF00391; Prion octapep; 6.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
FT SIGNAL 1 24  
FT CHAIN 25 264  
FT CARBOHYD 192 192 N-LINKED (GLCNAC. . .) (POTENTIAL).  
FT CARBOHYD 208 208 N-LINKED (GLCNAC. . .) (POTENTIAL).  
FT DISULFID 190 225 BY SIMILARITY.  
FT DOMAIN 54 103 6 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
Q.  
FT REPEAT 54 62  
FT REPEAT 63 70  
FT REPEAT 71 78  
FT REPEAT 79 86  
FT REPEAT 87 94  
FT REPEAT 95 103  
SQ SEQUENCE 264 AA; 28644 MW; FEB73F4173219B1 CRC64;  
Query Match 98.1%; Score 101; DB 1; Length 264;  
Best Local Similarity 90.0%; Pred. No. 3.2e-09;  
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVMMERVVEQMCCTOYQ 20  
Db 211 ETDVMMERVVEQMCCTOYQ 230

RESULT 15  
PRIO\_ATEGE STANDARD; PRT; 232 AA.  
ID PRIO\_ATEGE  
AC P40246;  
DT 01-FEB-1995 (Rel. 31, Created)  
DT 01-FEB-1995 (Rel. 31, Last sequence update)  
DT 15-MAR-2004 (Rel. 43, Last annotation update)  
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).  
GN PRNP.  
OS Ateles geoffroyi (Black-handed spider monkey).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.  
OX NCBI\_TaxID=9509;  
RN [1]  
RP SEQUENCE FROM N. A.  
RX MEDLINE=95139066; PubMed=7837269;  
RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
RT "Prion protein gene variation among primates."  
RL J. Mol. Biol. 245:362-374(1995).  
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
CC host genome and is expressed both in normal and infected cells.  
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
CC "rods".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: Belongs to the prion family.

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CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).

DR EMBL: U08309; AAC50097.1; -  
DR PIR: S71041; S71041.  
DR HSSP: P04156; TEIG.  
DR InterPro: IPR000817; Prion.  
DR Pfam: PF00377; prion; 1.  
DR Pfam: PF00391; Prion octapep; 5.  
DR PRINTS: PR00341; PRION.  
DR SMART: SM00157; PRP; 1.  
DR PROSITE: PS00291; PRION\_1; 1.  
DR PROSITE: PS00706; PRION\_2; 1.  
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
FT SIGNAL 1 15  
FT CHAIN 16 214  
FT PROPEP 215 >232  
FT LIPID 214 214  
FT DISULFID 163 198  
FT CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).  
FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (POTENTIAL).  
FT DOMAIN 44 84 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-  
Q.  
FT REPEAT 44 51  
FT REPEAT 52 59  
FT REPEAT 60 67  
FT REPEAT 68 75  
FT NON TER 232 232  
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;  
Query Match 96.1%; Score 99; DB 1; Length 232;  
Best Local Similarity 90.0%; Pred. No. 6e-09;  
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 ETDVMMERVVEQMCCTOYQ 20  
Db 184 ETDVMMERVVEQMCCTOYQ 203

Search completed: April 30, 2004, 15:29:28  
Job time : 9.58333 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 42.0933 Seconds  
(Without alignments)  
149.949 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103  
Sequence: 1 ETVDKMERVEQICVTQYQ 20

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

SPTREMBL\_25:\*

1: sp\_archaea:\*

2: sp\_bacteria:\*

3: sp\_fungi:\*

4: sp\_human:\*

5: sp\_invertebrate:\*

6: sp\_mammal:\*

7: sp\_mhc:\*

8: sp\_organelle:\*

9: sp\_phage:\*

10: sp\_plant:\*

11: sp\_rodent:\*

12: sp\_virus:\*

13: sp\_vertebrate:\*

14: sp\_unclassified:\*

15: sp\_virus:\*

16: sp\_bacteriophage:\*

17: sp\_archaea:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	240	11	Q8VHV4
2	103	100.0	248	11	Q8VHV5
3	103	100.0	253	11	Q9Z0T5
4	103	100.0	254	11	Q8VHV6
5	103	100.0	254	11	Q9Z0T4
6	103	100.0	254	11	Q9Z0T9
7	102	99.0	202	6	Q97696
8	102	99.0	220	6	Q866W7
9	102	99.0	248	6	Q866V6
10	101	98.1	200	6	Q97912
11	101	98.1	204	6	Q97629
12	101	98.1	204	6	Q97629
13	101	98.1	204	6	Q97629
14	101	98.1	211	6	Q97629
15	101	98.1	212	6	Q97629
16	101	98.1	215	6	Q97629

17	101	98.1	215	11	Q81W3
18	101	98.1	216	6	Q9TV00
19	101	98.1	220	6	Q92825
20	101	98.1	224	11	Q81W4
21	101	98.1	226	6	Q97907
22	101	98.1	235	6	Q97695
23	101	98.1	245	6	Q9MZU7
24	101	98.1	250	6	Q866V8
25	101	98.1	251	6	Q866V4
26	101	98.1	256	6	Q9MZU8
27	101	98.1	256	6	Q9Z0T9
28	101	98.1	256	6	Q865Z6
29	101	98.1	256	6	Q863E9
30	101	98.1	256	6	Q863E8
31	101	98.1	256	6	Q9Z0T9
32	101	98.1	256	6	Q9Z0T9
33	101	98.1	264	6	Q9Z0T9
34	101	98.1	264	6	Q864M0
35	101	98.1	264	6	Q9Z0T9
36	101	98.1	272	6	Q86XJ7
37	99	96.1	238	4	Q86XJ1
38	99	96.1	285	4	Q75942
39	98	95.1	222	6	Q97913
40	98	95.1	226	6	Q866M5
41	98	95.1	227	6	Q97906
42	98	95.1	227	6	Q97906
43	98	95.1	237	6	Q866U8
44	98	95.1	242	6	Q866U5
45	98	95.1	247	6	Q866V7

# ALIGNMENTS

## RESULT 1

Q8VHV4 ID Q8VHV4 PRELIMINARY; PRT; 240 AA.

AC Q8VHV4; 01-MAR-2002 (TRENBLREL. 20, Created)

DT 01-MAR-2002 (TRENBLREL. 20, Last sequence update)

DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)

DE Prion protein (Fragment).

GN PRP.

OS Microtus agrestis (Short-tailed field vole).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae; Microtus.

OC NCBI\_TaxID=29092;

OX

RN [1]\_TaxID=29092;

RP SEQUENCE FROM N.A.

RA Deil Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R., Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.,

RT "Easy transmission of sheep scrapie to wild rodents questions the species barrier concept in the epidemiology of transmissible prion protein encephalopathies."

RT Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.

RU

DR EMBL: AF367625; AAL57232.1; .

DR HSSP: P10279; IDW.

DR InterPro: IPR00817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 6.

DR PRINTS: PR00341; PRION.

DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00251; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.

FT NON TER 1

FT NON TER 240

SQ SEQUENCE 240 AA; 26308 MW; BCA4ED3F5F76693 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 240;  
Best Local Similarity 100.0%; Pred. No. 4.1e-09;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20  
 DB 192 ETDVXMMERVVEQMCVTQYQ 211

## RESULT 2

Q8VHV6 PRELIMINARY; PRT; 248 AA.  
 AC Q8VHV6; (TREMBlrel. 20, Created)  
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)  
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PrP.  
 OS Clethrionomys glareolus (Bank vole).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;  
 OC Clethrionomys.  
 CX NCBI\_Taxid=51090;  
 RN [1]

## SEQUENCE FROM N.A.

RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,  
 RA Di Garbo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.,  
 RT "Easy transmission of sheep scrapie to wild rodents questions the  
 RT species barrier concept in the epidemiology of transmissible  
 RT spongiform encephalopathies.";  
 RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AF367624; AAL57231.1; -.  
 DR HSSP; P10279; IDMY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion; 1.  
 DR Pfam; PF03991; prion.octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 DR NON\_TER 248 248  
 FT NON\_TER 248 248  
 SQ SEQUENCE 248 AA; 27259 MW; 81564ECD2773C2C CRC64;

Query Match 100.0%; Score 103; DB 11; Length 248;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20  
 DB 200 ETDVXMMERVVEQMCVTQYQ 219

## RESULT 3

Q9ZOT5 PRELIMINARY; PRT; 253 AA.  
 AC Q9ZOT5; (TREMBlrel. 10, Created)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PrP.  
 OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;  
 OC Meriones.  
 CX NCBI\_Taxid=10047;  
 RN [1]

## SEQUENCE FROM N.A.

RA TISSUE=Brain;  
 RA MEDLINE=99303687; PubMed=10373359;  
 RA Wopfner F., Weidenhofer G., Schneider R., von Bruhn A., Gluch S.,  
 RA Schwarz T.F., Werner T., Scharzl H.M.,  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 RT of flexible regions of the prion protein.";  
 RL J Mol Biol. 289:1163-1178(1999).  
 DR EMBL; AF117314; AAD19985.1; -.  
 DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion; 1.  
 DR Pfam; PF03991; prion.octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 DR NON\_TER 253 253  
 FT NON\_TER 253 253  
 SQ SEQUENCE 253 AA; 27747 MW; B44D16867A97307F CRC64;

Query Match 100.0%; Score 103; DB 11; Length 253;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20  
 DB 199 ETDVXMMERVVEQMCVTQYQ 218

## RESULT 4

Q8VHV6 PRELIMINARY; PRT; 254 AA.  
 AC Q8VHV6; (TREMBlrel. 20, Created)  
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)  
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)  
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)  
 DE Prion protein.  
 GN PrP.  
 OS Apodemus sylvaticus (European woodmouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;  
 OC Apodemus.  
 CX NCBI\_Taxid=10129;  
 RN [1]

RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,  
 RA Di Garbo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.,  
 RT "Easy transmission of sheep scrapie to wild rodents questions the  
 RT species barrier concept in the epidemiology of transmissible  
 RT spongiform encephalopathies.";  
 RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AF367623; AAL57230.1; -.  
 DR HSSP; P10279; IDMY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion; 1.  
 DR Pfam; PF03991; prion.octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 DR NON\_TER 254 254  
 FT NON\_TER 254 254  
 SQ SEQUENCE 254 AA; 27857 MW; CE2E5658C47A8885 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMMERVVEQMCVTQYQ 20  
 DB 200 ETDVXMMERVVEQMCVTQYQ 219

## RESULT 5

Q9ZOT4 PRELIMINARY; PRT; 254 AA.  
 AC Q9ZOT4; (TREMBlrel. 10, Created)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)  
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PrP.  
 OS Sigmodon fulviventer (carmy-bellied cotton rat).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;

OC Sigmodon.  
 RN NCBI\_TaxID=89246;  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR HSSP; P04925; IAG2.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF03991; Prion; octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 254  
 SQ SEQUENCE 254 AA; 27904 MM; 9EB7B1D106B43B97 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVMMERVVEQMCVTQYQ 20  
 Db 200 ETDVMMERVVEQMCVTQYQ 219

RESULT 6  
 ID Q9QYT9 PRELIMINARY; PRT; 254 AA.  
 AC Q9QYT9;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Long incubation prion protein.  
 GN PRNP.  
 OS Mus musculus (Mouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 RN NCBI\_TaxID=10090;  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99018115; PubMed=8799790;  
 RA Lee I.Y., Westaway D., Smit A.F., Wang K., Seto J., Chen L.,  
 RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Prusiner S.B.,  
 RA Hood L.E.;  
 RT "Complete genomic sequence and analysis of the prion protein gene  
 region from three mammalian species.";  
 RL Genome Res. 8:1022-1037(1998).  
 [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99457485; PubMed=10525406;  
 RA Moore R.C., Lee I.Y., Silverman G.L., Harrison P.M., Strone R.,  
 RA Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Liang Y.,  
 RA Meistrangelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,  
 RA Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,  
 RA Westaway D.;  
 RT "Ataxia in prion protein (PrP)-deficient mice is associated with  
 upregulation of the novel PrP-like protein doppel.";  
 RL J. Mol. Biol. 292:797-817(1999).  
 DR HSSP; U29187; AAD41440.1; -  
 DR InterPro: IPR000817; Prion.  
 DR Pfam; PF03377; Prion; 1.  
 DR Pfam; PF03991; Prion; octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.  
 KM Prion  
 SQ SEQUENCE 254 AA; 28010 MM; DE90D0CEE586CC0 CRC64;

Query Match 100.0%; Score 103; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 4.3e-09;  
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVMMERVVEQMCVTQYQ 20  
 Db 199 ETDVMMERVVEQMCVTQYQ 218

## RESULT 7

ID Q97696 PRELIMINARY; PRT; 202 AA.  
 AC Q97696;  
 DT 01-MAY-1999 (TrEMBLrel. 10, Created)  
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Lama glama (Llama).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.  
 RN NCBI\_TaxID=9844;  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR HSSP; AF113943; AAD13291.1; -  
 DR InterPro: IPR000817; Prion.  
 DR Pfam; PF03991; Prion; octapep; 6.  
 DR SMART; SMO0157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT NON\_TER 1  
 FT NON\_TER 202  
 SQ SEQUENCE 202 AA; 21860 MM; FC45232DB773F354 CRC64;

Query Match 99.0%; Score 102; DB 6; Length 202;  
 Best Local Similarity 95.0%; Pred. No. 5e-09;  
 Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ETDVMMERVVEQMCVTQYQ 20  
 Db 163 ETDVMMERVVEQMCVTQYQ 182

## RESULT 8

ID Q866W7 PRELIMINARY; PRT; 220 AA.  
 AC Q866W7;  
 DT 01-JUN-2003 (TrEMBLrel. 24, Created)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRNP.  
 OS Ochotona princeps (Southern American pika).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Lagomorpha; Ochotonidae; Ochotona.  
 RN NCBI\_TaxID=9978;  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=22408137; PubMed=12519913;  
 RA van Rheede T., Smolensars M.W., Madsen O., De Jong W.W.;  
 RT "Molecular evolution of the mammalian prion protein.";

```

RL Mol. Biol. Evol. 20:111-121 (2003).
DR EMBL: AY13036; AAN16490.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1
FT NON_TER 220
SQ SEQUENCE 220 AA; 23872 MW; 5318CF0BE39FB669 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 6; Length 220;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
Db 175 ETDIMKMERVVEQMCVTQYQ 194

RESULT 9
Q866V6 PRELIMINARY; PRT; 248 AA.
ID Q866V6;
AC 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DE 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Dicerus bicornis (Black rhinoceros).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Perissodactyla; Rhinocerotidae; Dicerus.
OX NCBI_TaxID=9805;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=22408137; PubMed=12519913;
RA van Rheede T., Smolemans M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
RL Mol. Biol. Evol. 20:111-121 (2003).
DR EMBL: AY13036; AAN16506.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 248
FT NON_TER 248 AA; 26915 MW; 38FFDCFD2A5B909 CRC64;
SQ SEQUENCE 248 AA; 26915 MW; 38FFDCFD2A5B909 CRC64;

Query Match
Best Local Similarity 99.0%; Score 102; DB 6; Length 248;
Matches 19; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
Db 203 ETDVKKMERVVEQMCVTQYQ 222

RESULT 10
Q97912 PRELIMINARY; PRT; 200 AA.
ID Q97912;
AC 097912;
DT 01-MAY-1999 (TRENBLREL. 10, Created)
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)
DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Bison bonaeus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

```

```

OC Bovidae; Bovinae; Bison.
OX NCBI_TaxID=9902;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Peripheral blood leukocytes;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Scharl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178 (1999).
DR EMBL: AF117328; AAD19999.1; -.
DR HSSP: P10279; IDWY.
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion; 1.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1
FT NON_TER 200
SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4BE5271B CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 6; Length 200;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20
Db 168 ETDIMKMERVVEQMCVTQYQ 187

RESULT 11
Q97629 PRELIMINARY; PRT; 204 AA.
ID Q97629;
AC 097629;
DT 01-MAY-1999 (TRENBLREL. 10, Created)
DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)
DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Odocoileus virginianus (white-tailed deer).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
OC Cervidae; Odocoileinae; Odocoileus.
OX NCBI_TaxID=9874;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
RT "PRP alleles in free ranging and captive white tailed deer (Odocoileus
RT virginianus)".
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
DR EMBL: AF091558; AAC69626.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1
FT NON_TER 204
SQ SEQUENCE 204 AA; 22154 MW; CA6A6E68F2B49C81E CRC64;

Query Match
Best Local Similarity 98.1%; Score 101; DB 6; Length 204;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 ETDVKKMERVVEQMCVTQYQ 20  
 Db 180 ETDIKMERVVEQMCITQYQ 199

## RESULT 12

Q9TS17 PRELIMINARY; PRT; 204 AA.  
 AC Q9TS17;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Odocoileus virginianus (white-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;  
 OC Cervidae; Odocoileinae; Odocoileus.  
 CX NCBI\_TaxID=9874;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";  
 RT Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 RL EMBL; AF091560; AAC69628.1; -.  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 204 204  
 SQ SEQUENCE 204 AA; 22184 MW; CA9BA283AF54081E CRC64;

Query Match 98.1%; Score 101; DB 6; Length 204;  
 Best Local Similarity 90.0%; Pred. No. 7.5e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20  
 Db 180 ETDIKMERVVEQMCITQYQ 199

## RESULT 13

Q9TS18 PRELIMINARY; PRT; 204 AA.  
 AC Q9TS18;  
 DT 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Odocoileus virginianus (white-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;  
 OC Cervidae; Odocoileinae; Odocoileus.  
 CX NCBI\_TaxID=9874;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus virginianus).";  
 RT Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 RL EMBL; AF091559; AAC69627.1; -.  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.

DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 204 204  
 SQ SEQUENCE 204 AA; 22181 MW; CA962B93FA84D4D3 CRC64;

Query Match 98.1%; Score 101; DB 6; Length 204;  
 Best Local Similarity 90.0%; Pred. No. 7.5e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20  
 Db 180 ETDIKMERVVEQMCITQYQ 199

## RESULT 14

Q77787 PRELIMINARY; PRT; 211 AA.  
 AC Q77787;  
 DT 01-NOV-1998 (TrEMBLrel. 08, Created)  
 DT 01-NOV-1998 (TrEMBLrel. 08, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Antilocapra americana (Pronghorn).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidae;  
 OC Antilocapridae; Antilocapra.  
 CX NCBI\_TaxID=9891;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "Prp gene of pronghorn antelope (Antilocapra americana) contains 6 octapeptide repeats.";  
 RT Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 RL EMBL; AF090852; AAC45030.1; -.  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 6.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 211 211  
 SQ SEQUENCE 211 AA; 22832 MW; B8E147ADF9A6752 CRC64;

Query Match 98.1%; Score 101; DB 6; Length 211;  
 Best Local Similarity 90.0%; Pred. No. 7.7e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKKMERVVEQMCVTQYQ 20  
 Db 188 ETDIKMERVVEQMCITQYQ 207

## RESULT 15

Q97698 PRELIMINARY; PRT; 212 AA.  
 AC Q97698;  
 DT 01-MAY-1999 (TrEMBLrel. 10, Created)  
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Cervus elaphus canadensis (wapiti).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervoidae;  
 OC Cervidae; Cervinae; Cervus.  
 CX NCBI\_TaxID=9861;  
 RN [1]

```

RP  SEQUENCE FROM N.A.
RX  MEDLINE=97317555; PubMed=974569;
RA  Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
RT  "Is codon 129 of prion protein polymorphic in human beings but not in
RL  animals?";
RN  Lancet 349:1603-1604(1997).
[2]
RP  SEQUENCE FROM N.A.
RX  MEDLINE=99303687; PubMed=10373359;
RA  Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RT  "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RL  of flexible regions of the prion protein.";
RN  J. Mol. Biol. 289:1163-1178(1999).
DR  EMBL; AF13945; AAD13293.1; -.
DR  HSSP; P10279; IDNY.
DR  InterPro; IPR00817; Prion.
DR  Pfam; PF00377; Prion; 1.
DR  Pfam; PF03991; Prion_octaped; 5.
DR  SMART; SM00157; PRP; 1.
DR  PROSITE; PS00291; PRION_1; 1.
DR  PROSITE; PS00706; PRION_2; 1.
FT  NON_TER
FT  NON_TER
SQ  SEQUENCE 212 AA; 23032 MW; 5758ABDF5E2A1B5 CRC64;

Query Match          98.1%; Score 101; DB 6; Length 212;
Best Local Similarity 90.0%; Pred. No. 7.8e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY  1 ETDVQMERVVEQMCVTQYQ 20
    |||:|||||:|||||:|||||
Db  167 ETDIKMERVVEQMCITQYQ 186

```

Search completed: April 30, 2004, 15:31:22  
 Job time : 42.0833 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 14.5933 Seconds  
(without alignments)  
131.920 Million cell updates/sec

Title: US-09-603-832-7

Perfect score: 103

Sequence: 1 ETDVKKMERVVEQMCVTQYQ 20

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: PIR.78:\*

2: Dirl:\*

3: Dirl:\*

4: Dirl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	226	2 A33892	prion-related prot
2	103	100.0	254	2 A34759	prion protein - ch
3	103	100.0	254	2 B34759	prion protein - go
4	103	100.0	254	2 A23544	major prion protei
5	101	98.1	256	2 JU0268	major prion protei
6	101	98.1	264	2 S37137	prion protein - gr
7	101	98.1	264	2 A54330	major prion protei
8	99	96.1	232	2 S71041	major prion protei
9	99	96.1	241	2 S71056	major prion protei
10	99	96.1	241	2 S71048	major prion protei
11	99	96.1	245	2 S71045	major prion protei
12	99	96.1	252	2 161848	major prion protei
13	99	96.1	253	1 UCHU	major prion protei
14	99	96.1	253	1 137032	major prion protei
15	99	96.1	253	2 S53635	prion protein - st
16	99	96.1	253	2 161847	major prion protei
17	99	96.1	253	2 184443	major prion protei
18	99	96.1	253	2 S71055	major prion protei
19	97	94.2	252	2 UC6175	prion protein - ra
20	97	94.2	256	2 S37149	prion protein - go
21	97	94.2	256	2 A54281	major prion protei
22	96	93.2	257	2 J01900	major prion protei
23	96	91.3	245	2 S53627	major prion protei
24	96	91.3	252	2 S53634	major prion protei
25	96	91.3	252	2 S53631	major prion protei
26	96	91.3	253	2 S53618	major prion protei
27	94	91.3	253	2 S53619	major prion protei
28	94	91.3	253	2 S53620	major prion protei
29	94	91.3	253	2 S53623	major prion protei

30	94	91.3	253	2 S53624	major prion protei
31	94	91.3	253	2 S53625	major prion protei
32	94	91.3	253	2 S53617	major prion protei
33	94	91.3	253	2 S53614	major prion protei
34	94	91.3	253	2 S53616	major prion protei
35	94	91.3	254	1 UCHYH	major prion prp-sc
36	94	91.3	257	2 A23545	major prion prp27
37	94	91.3	260	2 S53629	major prion protei
38	90	87.4	239	2 S53633	major prion protei
39	50	48.5	267	1 UCH	major prion protei
40	50	48.5	267	1 UCH	prion protein homo
41	50	48.5	273	2 A46280	prion protein - ch
42	46	42.7	2241	2 S09811	hypothetical prote
43	44	42.7	766	2 T47944	hypothetical prote
44	43	41.7	264	2 139141	transcription fact
45	43	41.7	319	2 F83402	binding protein co

## ALIGNMENTS

## RESULT 1

A33892

prion-related protein - rat (fragment)

C:Species: Rattus norvegicus (Norway rat)

C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 13-Aug-1999

C:Accession: A33892

R:Lab: Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A:Title: Cloning of rat "prion-related protein" cDNA.

A:Reference number: A53892; MUID:88037055; PMID:2889848

A:Accession: A53892

A:Status: Preliminary

A:Molecule type: mRNA

A:Residues: 1-226 <LHA>

A:Cross-references: GB:M20313; NID:G206392; PIDN:AAA41947.1; PID:G206392

C:Superfamily: major prion protein

Query Match

Best Local Similarity 100.0%; Score 103; DB 2; Length 226;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match

Best Local Similarity 100.0%; Score 103; DB 2; Length 254;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match

Best Local Similarity 100.0%; Score 103; DB 2; Length 254;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match

Best Local Similarity 100.0%; Score 103; DB 2; Length 254;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;



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RESULT 3
B34759
prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:50158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-References: GB:M33959; NID:G191182; PIDN:AAA37014.1; PID:G191183
C/Superfamily: major prion protein

Query Match          100.0%; Score 103; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 2.3e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
Db 200 ETDVQMERVVEQMCVTQYQ 219

RESULT 4
A23544
major prion protein precursor - mouse
N/Alternate names: PrP; Scrapie prion
C/Species: Mus musculus (house mouse)
C/Date: 22-Jul-1997 #sequence_revision 22-Jul-1997 #text_change 11-Aug-2003
C/Accession: A29669; A23544; S02521; A22315
R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S
Cell 51, 651-662, 1987
A/Title: Distinct prion proteins in short and long scrapie incubation period mice.
A/Reference number: A29669; MUID:88052869; PMID:2890436
A/Accession: A29669
A/Molecule type: DNA
A/Residues: 1-254 <WES>
A/Cross-References: GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529
A/Experimental source: strains NZW and I/LmT
A/Note: The sequence shown is from the NZW strain; the sequence from the I/LmT strain di
R/Locht, C.; Chesbro, B.; Race, R.; Keith, J.M.
Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
A/Reference number: A23544; MUID:66313583; PMID:3462700
A/Accession: A23544
A/Molecule type: mRNA
A/Residues: 1-254 <LOC>
R/Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
Eur. J. Biochem. 172, 271-277, 1988
A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a
A/Reference number: S02521; MUID:88166695; PMID:2894984
A/Accession: S02521
A/Molecule type: protein
A/Residues: 1-254 <HOP>
R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.
Nature 315, 331-333, 1985
A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u
A/Reference number: A22315; MUID:85213844; PMID:3923361
A/Accession: A22315
A/Molecule type: mRNA
A/Residues: 87-132, 'V', 134-164 <CHE>
C/Superfamily: major prion protein
C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphoryl
F.1-22/Dominant: signal sequence #status predicted <SIG>
F.23-231/Product: major prion protein #status predicted <MAT>
F.233-254/Dominant: carboxyl-terminal propetide #status predicted <CTP>
F.178-213/Disulfide bonds: #status predicted
F.180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted
F.233/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form
Query Match          100.0%; Score 103; DB 2; Length 254;

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Best Local Similarity 100.0%; Pred. No. 2.3e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 5
JU0268
major prion protein 2 precursor - bovine
N/Alternate names: prion protein, short variant; Prp protein
C/Species: Bos primigenius taurus (cattle)
C/Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 23-Mar-1995
C/Accession: JU0268
R/Yoshimoto, Y.; Iinuma, T.; Ishiguro, N.; Horuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A/Reference number: UT0952
A/Accession: JU0268
A/Molecule type: DNA
A/Residues: 1-256 <YOS>
C/Superfamily: major prion protein
C/Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F.1-24/Dominant: signal sequence #status predicted <SIG>
F.25-256/Product: major prion protein 2 #status predicted <MAT>
F.60-91/Region: 8-residue repeats
F.182-217/Disulfide bonds: #status predicted
F.184-200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match          98.1%; Score 101; DB 2; Length 256;
Best Local Similarity 90.0%; Pred. No. 5e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
Db 203 ETDVQMERVVEQMCVTQYQ 222

RESULT 6
S37137
prion protein - greater kudu
C/Species: Tragelaphus streptoceros (greater kudu)
C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 13-Aug-1999
C/Accession: S37137
R/Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
submitted to the EMBL Data Library, August 1993
A/Reference number: S37137
A/Accession: S37137
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-264 <MA>
A/Cross-References: EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G398938
C/Superfamily: major prion protein

Query Match          98.1%; Score 101; DB 2; Length 264;
Best Local Similarity 90.0%; Pred. No. 5.2e-09;
Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20
Db 211 ETDVQMERVVEQMCVTQYQ 230

RESULT 7
A54330
major prion protein 1 precursor - bovine
N/Alternate names: prion protein, long variant; Prp protein
C/Species: Bos primigenius taurus (cattle)
C/Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 02-Mar-2001
C/Accession: A54330; UT0953; UT0952; A48551; S07347; I46931
R/Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A/Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C-

```

A:Reference number: A54330; MUID:91116314; PMID:1671225  
 A:Accession: A54330  
 A:Molecule type: DNA  
 A:Residues: 1-264 <GOL>  
 A:Cross-references: GB:X55882; NID:G683; PIDN:CAA39368.1; PID:G684  
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.  
 Submitted to JIPID, November 1991  
 A:Reference number: JTO952  
 A:Accession: JTO952  
 A:Molecule type: DNA  
 A:Residues: 1-264 <YOS>  
 A:Cross-references: GB:D10613; NID:G217595; PIDN:BA01468.1; PID:G217596  
 A:Accession: JTO952  
 A:Molecule type: DNA  
 A:Residues: 1-217 'K', 219-264 <YOS>  
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.  
 Virus Genes 6, 343-356, 1992  
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929  
 A:Reference number: A48551; MUID:93118243; PMID:1362024  
 A:Accession: A48551  
 A:Molecule type: mRNA  
 A:Residues: 1-217 'K', 219-264 <YOS>  
 A:Cross-references: GB:AB001465; NID:G1888342; PIDN:BA19253.1; PID:G1888343  
 A:Experimental source: Brain  
 A:Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:P.121621)  
 R:Hope, J.; Reekie, L.J.D.; Hunter, N.; Mulhaup, G.; Beyreuther, K.; White, H.; Scott, N.  
 Nature 336, 390-392, 1988  
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated  
 A:Reference number: S07347; MUID:89051122; PMID:2904126  
 A:Accession: S07347  
 A:Molecule type: protein  
 A:Residues: 25-36 <HOP>  
 R:Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J.  
 Infect. Dis. 167, 602-613, 1993  
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform  
 A:Reference number: 146931; MUID:93179783; PMID:8450932  
 A:Accession: 146931  
 A:Status: preliminary; translated from GB/EMBL/DBJ  
 A:Molecule type: mRNA  
 A:Residues: 1-264 <PRU>  
 A:Cross-references: GB:S55629; NID:G266111; PIDN:AAB25514.1; PID:G266112  
 C:Genetics:  
 A:Gene: PrP  
 C:Superfamily: major prion protein  
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat  
 F:1.24/Domains: signal sequence #status predicted <SIG>  
 F:25-264/Product: major prion protein 1 #status predicted <MAT>  
 F:60-99/Region:8-residue repeats (N-G-Q-P-H-G-G-G)  
 F:190-225/Distulfide bonds: #status predicted  
 F:192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 98.1%; Score 101; DB 2; Length 264;  
 Best Local Similarity 90.0%; Pred. No. 5,2e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 211 ETDVQMERVVEQMCVTQYQ 230

RESULT 8  
 S71041  
 major prion protein - black-handed spider monkey (fragment)  
 C:Species: Ateles geoffroyi (black-handed spider monkey)  
 C:Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C:Accession: S71041; S53630  
 R:Schatz, H.M.  
 Submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71041  
 A:Accession: S71041  
 A:Molecule type: DNA  
 A:Residues: 1-232 <SCH>  
 A:Cross-references: EMBL:U08309; NID:G474376; PIDN:AACS0097.1; PID:G474377

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1998  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53614  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-194 'R', 196-231 <SCH>  
 A:Cross-references: EMBL:U08309  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 232;  
 Best Local Similarity 90.0%; Pred. No. 9.7e-09;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 184 ETDVQMERVVEQMCVTQYQ 203

RESULT 9  
 S71056  
 major prion protein - mandrill (fragment)  
 C:Species: Papio sphinx, Mandrillus sphinx (mandrill)  
 C:Date: 27-Oct-1996 #sequence\_revision 14-Feb-1997 #text\_change 11-Aug-2003  
 C:Accession: S71056; S53621  
 R:Schatz, H.M.  
 Submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71056  
 A:Accession: S71056  
 A:Molecule type: DNA  
 A:Residues: 1-241 <SCH>  
 A:Cross-references: EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G474365  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53621  
 A:Status: nucleic acid sequence not shown  
 A:Molecule type: DNA  
 A:Residues: 1-203 'R', 205-240 <SCH>  
 A:Cross-references: EMBL:U08303  
 C:Superfamily: major prion protein  
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 96.1%; Score 99; DB 2; Length 241;  
 Best Local Similarity 90.0%; Pred. No. 1e-08;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

CY 1 ETDVQMERVVEQMCVTQYQ 20  
 DB 193 ETDVQMERVVEQMCVTQYQ 212

RESULT 10  
 S71048  
 major prion protein - Callithrix jacchus (fragment)  
 C:Species: Callithrix jacchus  
 C:Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C:Accession: S71048; S53632  
 R:Schatz, H.M.  
 Submitted to the EMBL Data Library, April 1994  
 A:Reference number: S71048  
 A:Accession: S71048  
 A:Molecule type: DNA  
 A:Residues: 1-241 <SCH>  
 A:Cross-references: EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G475586  
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A:Title: Prion protein gene variation among primates.  
 A:Reference number: S53614; MUID:95139066; PMID:7837269  
 A:Accession: S53632



A/Cross-references: GB:S71208; NID:g239877; PIDN:AA820521.1; PID:g239878; GB:S71210; NID:  
 C/Genetics:  
 A/Gene: GDB:PRNP, CJD, PRIP  
 A/Cross-references: GDB:120720; OMIM:176640; OMIM:137440  
 A/Map position: 20pter-20p12  
 A/Intons: #status absent  
 A/Note: one intron occurs before the initiator codon  
 C/Suprafamily: major prion protein  
 C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy  
 F:1-22/Domain: signal sequence #status predicted <SIG>  
 F:23-230/Product: major prion protein #status predicted <MAT>  
 F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)  
 F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>  
 F:179-214/Dissulfide bonds: #status predicted  
 F:181,197/Binding sites: carbohydrate (Asn) (covalent) #status predicted  
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 96.1%; Score 99; DB 1; Length 253;  
 Best Local Similarity 90.0%; Pred. No. 1.1e-08;

Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
 |||||  
 Db 200 ETDVQMERVVEQMCITQYE 219

## RESULT 14

major prion protein precursor - gorilla  
 C/Species: Gorilla gorilla (gorilla)  
 C/Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
 C/Accession: 137032  
 R:Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; I  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
 A/Title: Infectious amyloid precursor gene sequences in primates used for experimental  
 A/Reference number: 136907; MUID:95083661; PMID:7991600  
 A/Accession: 137032  
 A/Status: preliminary; translated from GB/EMBL/DBJ  
 A/Molecule type: DNA  
 A/Residues: 1-253 <RES>  
 A/Cross-references: EMBL:U15166; NID:9563208; PIDN:AAA68633.1; PID:9563209  
 C/Suprafamily: major prion protein

Query Match 96.1%; Score 99; DB 2; Length 253;  
 Best Local Similarity 90.0%; Pred. No. 1.1e-08;

Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
 |||||  
 Db 200 ETDVQMERVVEQMCITQYE 219

## RESULT 15

prion protein - siamang  
 C/Species: Hylobates syndactylus (siamang)  
 C/Date: 15-Jul-1995 #sequence\_revision 19-Apr-1996 #text\_change 13-Aug-1999  
 C/Accession: S53635  
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53635  
 A/Status: nucleic acid sequence not shown; translation not shown  
 A/Molecule type: DNA  
 A/Residues: 1-253 <SCH>  
 A/Cross-references: EMBL:U08308; NID:9474374; PIDN:AA50096.1; PID:9474375  
 A/Note: the source was designated as Symphalangus syndactylus  
 A/Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994  
 C/Suprafamily: major prion protein

Query Match 96.1%; Score 99; DB 2; Length 253;

Best Local Similarity 90.0%; Pred. No. 1.1e-08;  
 Matches 18; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
 |||||  
 Db 200 ETDVQMERVVEQMCITQYE 219

Search completed: April 30, 2004, 15:32:09  
 Job time : 14.5633 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

## OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 44.5833 Seconds

(without alignments)  
124.347 Million cell updates/sec

Title: US-09-603-832-7

Sequence: 1 ETVVXKMERVVEQMCTQYQ 20

Scoring table: BLOSUM62

Gap 10.0 , Gapext 0.5

Searched: 118120 seqs, 277189581 residues

Total number of hits satisfying chosen parameters: 118120

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

## Database :

1: /cgn2\_6/prodata/1/pubpa/US07\_PUBCOMB.pep:\*  
2: /cgn2\_6/prodata/1/pubpa/PCRT\_NEW\_PUB.pep:\*  
3: /cgn2\_6/prodata/1/pubpa/US06\_NEW\_PUB.pep:\*  
4: /cgn2\_6/prodata/1/pubpa/US06\_PUBCOMB.pep:\*  
5: /cgn2\_6/prodata/1/pubpa/US07\_NEW\_PUB.pep:\*  
6: /cgn2\_6/prodata/1/pubpa/PCRTUS\_PUBCOMB.pep:\*  
7: /cgn2\_6/prodata/1/pubpa/US08\_NEW\_PUB.pep:\*  
8: /cgn2\_6/prodata/1/pubpa/US08\_PUBCOMB.pep:\*  
9: /cgn2\_6/prodata/1/pubpa/US09\_PUBCOMB.pep:\*  
10: /cgn2\_6/prodata/1/pubpa/US09\_PUBCOMB.pep:\*  
11: /cgn2\_6/prodata/1/pubpa/US09\_PUBCOMB.pep:\*  
12: /cgn2\_6/prodata/1/pubpa/US09\_NEW\_PUB.pep:\*  
13: /cgn2\_6/prodata/1/pubpa/US10\_PUBCOMB.pep:\*  
14: /cgn2\_6/prodata/1/pubpa/US10\_PUBCOMB.pep:\*  
15: /cgn2\_6/prodata/1/pubpa/US10\_PUBCOMB.pep:\*  
16: /cgn2\_6/prodata/1/pubpa/US10\_NEW\_PUB.pep:\*  
17: /cgn2\_6/prodata/1/pubpa/US60\_NEW\_PUB.pep:\*  
18: /cgn2\_6/prodata/1/pubpa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	103	100.0	124	14	US-10-050-902-324
2	103	100.0	124	14	US-10-050-898-324
3	103	100.0	124	15	US-10-346-190-93
4	103	100.0	164	9	US-09-745-003-12
5	103	100.0	225	14	US-10-301-488A-25
6	103	100.0	226	14	US-10-205-194-121
7	103	100.0	254	9	US-09-943-906-1
8	103	100.0	254	12	US-10-438-628-2
9	103	100.0	254	13	US-10-106-574-5
10	103	100.0	254	13	US-10-106-574-6
11	103	100.0	254	13	US-10-106-574-7
12	103	100.0	254	13	US-10-106-574-8
13	103	100.0	254	14	US-10-355-780-10
14	103	100.0	254	14	US-10-304-630-20
15	103	100.0	254	14	US-10-304-630-21

16	103	100.0	254	14	US-10-304-630-22	Sequence 22, Appl
17	103 <th>100.0</th> <td>254</td> <td>14</td> <td>US-10-304-630-23</td> <td>Sequence 23, Appl</td>	100.0	254	14	US-10-304-630-23	Sequence 23, Appl
18	103 <th>100.0</th> <td>254</td> <td>14</td> <td>US-10-301-488A-24</td> <td>Sequence 24, Appl</td>	100.0	254	14	US-10-301-488A-24	Sequence 24, Appl
19	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-410-907A-6</td> <td>Sequence 6, Appl</td>	100.0	254	15	US-10-410-907A-6	Sequence 6, Appl
20	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-410-907A-7</td> <td>Sequence 7, Appl</td>	100.0	254	15	US-10-410-907A-7	Sequence 7, Appl
21	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-410-907A-9</td> <td>Sequence 9, Appl</td>	100.0	254	15	US-10-410-907A-9	Sequence 9, Appl
22	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-410-907A-10</td> <td>Sequence 10, Appl</td>	100.0	254	15	US-10-410-907A-10	Sequence 10, Appl
23	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-346-190-87</td> <td>Sequence 87, Appl</td>	100.0	254	15	US-10-346-190-87	Sequence 87, Appl
24	103 <th>100.0</th> <td>254</td> <td>15</td> <td>US-10-435-602-1</td> <td>Sequence 1, Appl</td>	100.0	254	15	US-10-435-602-1	Sequence 1, Appl
25	103 <th>100.0</th> <td>350</td> <td>14</td> <td>US-10-050-902-323</td> <td>Sequence 323, App</td>	100.0	350	14	US-10-050-902-323	Sequence 323, App
26	103 <th>100.0</th> <td>350</td> <td>14</td> <td>US-10-050-898-323</td> <td>Sequence 323, App</td>	100.0	350	14	US-10-050-898-323	Sequence 323, App
27	103 <th>100.0</th> <td>350</td> <td>15</td> <td>US-10-346-190-92</td> <td>Sequence 92, Appl</td>	100.0	350	15	US-10-346-190-92	Sequence 92, Appl
28	103 <th>100.0</th> <td>439</td> <td>13</td> <td>US-10-115-884-2</td> <td>Sequence 2, Appl</td>	100.0	439	13	US-10-115-884-2	Sequence 2, Appl
29	102 <th>99.0</th> <td>263</td> <td>9</td> <td>US-09-943-906-3</td> <td>Sequence 3, Appl</td>	99.0	263	9	US-09-943-906-3	Sequence 3, Appl
30	102 <th>99.0</th> <td>263</td> <td>13</td> <td>US-10-435-602-3</td> <td>Sequence 349, App</td>	99.0	263	13	US-10-435-602-3	Sequence 349, App
31	101 <th>98.1</th> <td>117</td> <td>14</td> <td>US-10-050-902-349</td> <td>Sequence 349, App</td>	98.1	117	14	US-10-050-902-349	Sequence 349, App
32	101 <th>98.1</th> <td>117</td> <td>14</td> <td>US-10-050-898-349</td> <td>Sequence 90, Appl</td>	98.1	117	14	US-10-050-898-349	Sequence 90, Appl
33	101 <th>98.1</th> <td>117</td> <td>15</td> <td>US-10-346-190-90</td> <td>Sequence 9, Appl</td>	98.1	117	15	US-10-346-190-90	Sequence 9, Appl
34	101 <th>98.1</th> <td>161</td> <td>9</td> <td>US-09-745-003-9</td> <td>Sequence 2, Appl</td>	98.1	161	9	US-09-745-003-9	Sequence 2, Appl
35	101 <th>98.1</th> <td>256</td> <td>13</td> <td>US-10-109-551-2</td> <td>Sequence 2, Appl</td>	98.1	256	13	US-10-109-551-2	Sequence 2, Appl
36	101 <th>98.1</th> <td>256</td> <td>13</td> <td>US-10-109-551-6</td> <td>Sequence 8, Appl</td>	98.1	256	13	US-10-109-551-6	Sequence 8, Appl
37	101 <th>98.1</th> <td>256</td> <td>13</td> <td>US-10-109-551-8</td> <td>Sequence 8, Appl</td>	98.1	256	13	US-10-109-551-8	Sequence 8, Appl
38	101 <th>98.1</th> <td>256</td> <td>13</td> <td>US-10-109-551-10</td> <td>Sequence 26, Appl</td>	98.1	256	13	US-10-109-551-10	Sequence 26, Appl
39	101 <th>98.1</th> <td>256</td> <td>14</td> <td>US-10-304-630-26</td> <td>Sequence 82, Appl</td>	98.1	256	14	US-10-304-630-26	Sequence 82, Appl
40	101 <th>98.1</th> <td>256</td> <td>15</td> <td>US-10-346-190-82</td> <td>Sequence 83, Appl</td>	98.1	256	15	US-10-346-190-82	Sequence 83, Appl
41	101 <th>98.1</th> <td>256</td> <td>15</td> <td>US-10-346-190-83</td> <td>Sequence 84, Appl</td>	98.1	256	15	US-10-346-190-83	Sequence 84, Appl
42	101 <th>98.1</th> <td>263</td> <td>14</td> <td>US-10-346-190-84</td> <td>Sequence 31, Appl</td>	98.1	263	14	US-10-346-190-84	Sequence 31, Appl
43	101 <th>98.1</th> <td>263</td> <td>14</td> <td>US-10-301-488A-31</td> <td>Sequence 11, Appl</td>	98.1	263	14	US-10-301-488A-31	Sequence 11, Appl
44	101 <th>98.1</th> <td>264</td> <td>14</td> <td>US-10-209-194-2</td> <td></td>	98.1	264	14	US-10-209-194-2	
45	101 <th>98.1</th> <td>264</td> <td>14</td> <td>US-10-355-780-11</td> <td></td>	98.1	264	14	US-10-355-780-11	

## ALIGNMENTS

RESULT 1  
US-10-050-902-324  
Sequence 324, Application US/10050902  
Publication No. US20030175290A1  
GENERAL INFORMATION:  
APPLICANT: Renner, Wolfgang A.  
APPLICANT: Bachmann, Martin  
APPLICANT: Tisot, Alain  
APPLICANT: Maurer, Patrick  
APPLICANT: Lechner, Franziska  
APPLICANT: Seibel, Peter  
APPLICANT: Piossek, Christine  
TITLE OF INVENTION: Molecular Antigen Array  
FILE REFERENCE: 1700.0190004  
CURRENT FILING DATE: US/10/050.902  
PRIOR FILING DATE: 2002-01-18  
PRIOR APPLICATION NUMBER: US 60/262,379  
PRIOR FILING DATE: 2001-01-19  
PRIOR APPLICATION NUMBER: US 60/288,549  
PRIOR FILING DATE: 2001-05-04  
PRIOR APPLICATION NUMBER: US 60/326,998  
PRIOR FILING DATE: 2001-10-05  
PRIOR APPLICATION NUMBER: US 60/331,045  
PRIOR FILING DATE: 2001-11-07  
NUMBER OF SEQ ID NOS: 350  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 324  
TYPE: PRP  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: mPrPt construct  
US-10-050-902-324  
Query Match 100.0%; Score 103; DB 14; Length 124;  
Best Local Similarity 100.0%; Pred. No. 5.6e-09;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMMERVVEQMCVTQYQ 20  
Db 80 ETDVKMMERVVEQMCVTQYQ 99

RESULT 2  
US-10-050-898-324

```

; Sequence 324, Application US/10050898
; Publication No. US2003017571A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Plosser, Christine
; APPLICANT: Ortmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: Patentl Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURES:
; OTHER INFORMATION: Protein sequence of mPrPC
; US-10-050-898-324

```

```

Query Match      100.0%; Score 103; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5,6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 ETDYKMERVVFQMCCTQIQ 20
      db      |||||
      80 ETDYKMERVVFQMCCTQIQ 99

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RESULT 3  
US-10-346-190-93  
Sequence 93. Application US/10346190  
Publication No. US20030219459A1  
GENERAL INFORMATION:  
APPLICANT: Bachmann, Martin  
APPLICANT: Maurer, Patrick  
APPLICANT: Pellielo, Erica  
APPLICANT: Renner, Wolfgang A.  
FILE OF INVENTION: Pilon Protein Carrier-Confjugates  
FILE REFERENCE: 1700.0290003  
CURRENT APPLICATION NUMBER: US/10/346,190  
CURRENT FILING DATE: 2003-01-17  
PRIOR APPLICATION NUMBER: 60/396,590  
PRIOR FILING DATE: 2002-07-18  
PRIOR APPLICATION NUMBER: 60/393,725  
PRIOR FILING DATE: 2002-07-08  
PRIOR APPLICATION NUMBER: 60/389,898  
PRIOR FILING DATE: 2002-06-20  
PRIOR APPLICATION NUMBER: PCT/1802/00166  
PRIOR FILING DATE: 2002-01-21

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; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 93

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Query Match	100.0%;	Score 103;	DB 15;	Length 124;
Best Local Similarity	100.0%;	Pred. No. 5.6e-09;		
Matches 20;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;

```

RESULT 4
US-09-745-003-12
Sequence 12, Application US/09745003
Patent No. US2002004122A1
GENERAL INFORMATION:
APPLICANT: Saetan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 12
LENGTH: 164
TYPE: PRT
ORGANISM: rodent
US-09-745-003-12

```

```

QY      1  ETDVCKMERVVEQMCVCTQYQ  20
      |||||
Db      109  ETDVCKMERVVEQMCVCTQYQ  128
      |||||
Query Match: 100.0%; Score 103; DB 9; Length 164;
Best Local Similarity 100.0%; Pval 7.6e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 5
US-10-301-488A-25
; Sequence 25, Application US/10301488A
; Publication No. US2003016558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Blinn
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN, AND
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF, AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT APPLICATION NUMBER: US/10/301,488A
; PRIORITY FILING DATE: 2002-11-21
; PRIORITY FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 25
; LENGTH: 225
; TYPE: PRT
; ORGANISM: Rat
; US-10-301-488A-25

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Query Match 100.0%; Score 103; DB 14; Length 225;  
Best Local Similarity 100.0%; Pred. No. 1.1e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20  
|||  
172 ETDVXMERVVEQMCVTQYQ 191

RESULT 6  
US-10-205-194-121

Sequence 121, Application US/10205194  
Publication No. US20030134301A1  
GENERAL INFORMATION:  
APPLICANT: Warner-Lambert Company  
APPLICANT: Lee, Kevin  
APPLICANT: Dixon, Alistair  
APPLICANT: Brooksbank, Robert  
APPLICANT: Pinnock, Robert  
TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain  
FILE REFERENCE: WI-A-018201  
CURRENT APPLICATION NUMBER: US/10/205,194  
CURRENT FILING DATE: 5200-07-24  
PRIOR APPLICATION NUMBER: GB 0118354.0  
PRIOR FILING DATE: 2001-07-27  
NUMBER OF SEQ ID NOS: 177  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 121  
LENGTH: 226  
TYPE: PRT  
ORGANISM: Rattus norvegicus  
FEATURE:  
OTHER INFORMATION: PRP  
US-10-205-194-121

Query Match 100.0%; Score 103; DB 14; Length 226;  
Best Local Similarity 100.0%; Pred. No. 1.1e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20  
|||  
172 ETDVXMERVVEQMCVTQYQ 191

RESULT 7  
US-09-943-906-1

Sequence 1, Application US/09943906  
Patent No. US20020150571A1  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
APPLICANT: Williamson, R. Anthony  
APPLICANT: Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM Compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>

## ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single

TOPOLOGY: linear  
MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
US-09-943-906-1

Query Match 100.0%; Score 103; DB 9; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-09;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20  
|||  
199 ETDVXMERVVEQMCVTQYQ 218

RESULT 8  
US-10-438-628-2

Sequence 2, Application US/10438628  
Publication No. US20040048237A1  
GENERAL INFORMATION:  
APPLICANT: Lindquist et al.  
TITLE OF INVENTION: MAMMALIAN PRION PROTEINS AND TRANSGENIC MICE EXPRESSING THEM  
FILE REFERENCE: WI-A-P01-004  
CURRENT APPLICATION NUMBER: US/10/438,628  
CURRENT FILING DATE: 2003-05-15  
PRIOR APPLICATION NUMBER: 60/380950  
PRIOR FILING DATE: 2002-05-15  
PRIOR APPLICATION NUMBER: 60/380953  
PRIOR FILING DATE: 2002-05-15  
PRIOR APPLICATION NUMBER: 60/419569  
PRIOR FILING DATE: 2002-10-17  
PRIOR APPLICATION NUMBER: 60/419574  
PRIOR FILING DATE: 2002-10-17  
NUMBER OF SEQ ID NOS: 2  
SOFTWARE: PatentIn version 3.2  
SEQ ID NO 2  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-10-438-628-2

Query Match 100.0%; Score 103; DB 12; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVXMERVVEQMCVTQYQ 20  
|||  
199 ETDVXMERVVEQMCVTQYQ 218

RESULT 9  
US-10-106-574-5

Sequence 5, Application US/10106574  
Publication No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
APPLICANT: Stewart, Richard S.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease  
FILE REFERENCE: 09789260.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 5  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Murinae gen. sp.  
US-10-106-574-5

Query Match 100.0%; Score 103; DB 13; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 10  
US-10-106-574-6  
Sequence 6, Application US/10106574  
Publication No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
APPLICANT: Stewart, Richard S.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 6  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Murinae gen. sp.  
US-10-106-574-6

Query Match 100.0%; Score 103; DB 13; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 11  
US-10-106-574-7  
Sequence 7, Application US/10106574  
Publication No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
APPLICANT: Stewart, Richard S.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 7  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Murinae gen. sp.  
US-10-106-574-7

Query Match 100.0%; Score 103; DB 13; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 12  
US-10-106-574-8  
Sequence 8, Application US/10106574  
Publication No. US20020164335A1  
GENERAL INFORMATION:  
APPLICANT: Harris, David A.  
APPLICANT: Stewart, Richard S.  
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease  
FILE REFERENCE: 09789280.0003  
CURRENT APPLICATION NUMBER: US/10/106,574  
CURRENT FILING DATE: 2002-03-26  
NUMBER OF SEQ ID NOS: 8  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 8  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Murinae gen. sp.  
US-10-106-574-8

Query Match 100.0%; Score 103; DB 13; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 13  
US-10-355-780-10  
Sequence 10, Application US/10355780  
Publication No. US20030143224A1  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley  
APPLICANT: Safar, Utri  
APPLICANT: Williamson, Anthony  
APPLICANT: Burton, Dennis  
TITLE OF INVENTION: Antibodies Specific for Ungulate PrP  
FILE REFERENCE: UCAL-194  
CURRENT APPLICATION NUMBER: US/10/355,780  
CURRENT FILING DATE: 2003-01-30  
PRIOR APPLICATION NUMBER: US/09/627,218B  
PRIOR FILING DATE: 2000-07-27  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 10  
LENGTH: 254  
TYPE: PRT  
ORGANISM: Mus musculus  
US-10-355-780-10

Query Match 100.0%; Score 103; DB 14; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVQMERVVEQMCVTQYQ 20  
|||  
Db 199 ETDVQMERVVEQMCVTQYQ 218

RESULT 14  
US-10-304-630-20  
Sequence 20, Application US/10304630  
Publication No. US20030161836A1  
GENERAL INFORMATION:  
APPLICANT: D-Gen Limited  
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE  
FILE REFERENCE: ICOT/P219S2  
CURRENT APPLICATION NUMBER: US/10/304,630  
CURRENT FILING DATE: 2002-11-26  
PRIOR APPLICATION NUMBER: US/09/431,887  
PRIOR FILING DATE: 1999-11-02



; PRIOR APPLICATION NUMBER: GB 9824091.4  
; PRIOR FILING DATE: 1999-11-04  
; NUMBER OF SEQ ID NOS: 37  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 20  
; LENGTH: 254  
; TYPE: PRT  
; ORGANISM: Mus sp.  
US-10-304-630-20

Query Match 100.0%; Score 103; DB 14; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQKCVTOYQ 20  
|||  
Db 199 ETDVKMERVVEQKCVTOYQ 218

RESULT 15  
US-10-304-630-21  
; Sequence 21, Application US/10304630  
; Publication No. US20030161835A1  
; GENERAL INFORMATION:  
; APPLICANT: D-Gen Limited  
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE  
; FILE REFERENCE: ICOT/P21952  
; CURRENT APPLICATION NUMBER: US/10/304,630  
; CURRENT FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: US/09/431,887  
; PRIOR FILING DATE: 1999-11-02  
; PRIOR APPLICATION NUMBER: GB 9824091.4  
; PRIOR FILING DATE: 1999-11-04  
; NUMBER OF SEQ ID NOS: 37  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 21  
; LENGTH: 254  
; TYPE: PRT  
; ORGANISM: Mus sp.  
US-10-304-630-21

Query Match 100.0%; Score 103; DB 14; Length 254;  
Best Local Similarity 100.0%; Pred. No. 1.2e-08;  
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ETDVKMERVVEQKCVTOYQ 20  
|||  
Db 199 ETDVKMERVVEQKCVTOYQ 218

Search completed: April 30, 2004, 15:35:04  
Job time : 44.583 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 29.4583 Seconds  
(without alignments)  
149.949 Million cell updates/sec

Title: US-09-603-832-6  
Perfect score: 71  
Sequence: 1 CWNITIKQTVTTT 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues  
Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: SP archaea:\*  
2: SP bacteria:\*  
3: SP fungi:\*  
4: SP human:\*  
5: SP invertebrate:\*  
6: SP mammal:\*  
7: SP\_mmc:\*  
8: SP organelle:\*  
9: SP phage:\*  
10: SP plant:\*  
11: SP rodent:\*  
12: SP\_virus:\*  
13: SP vertebrate:\*  
14: SP\_unclassified:\*  
15: SP\_virus:\*  
16: SP\_bacteria:\*  
17: SP\_archaea:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	60.5	85.2	212	11 Q811W5	Q811W5 cavia porce
2	60.5	85.2	220	6 Q866W7	Q866W7 ochotona pr
3	60.5	85.2	238	4 Q86XR1	Q86XR1 homo sapien
4	60.5	85.2	240	11 Q8VH4	Q8VH4 microtus ag
5	60.5	85.2	243	11 P978S5	P978S5 mesocricetu
6	60.5	85.2	248	11 Q8VH5	Q8VH5 clethrionom
7	60.5	85.2	253	11 Q9Z0T5	Q9Z0T5 meriones un
8	60.5	85.2	254	6 Q866W8	Q866W8 rupia tana
9	60.5	85.2	254	11 Q8VH6	Q8VH6 apodemus sy
10	60.5	85.2	254	11 Q9Z0T4	Q9Z0T4 sigmodon fu
11	60.5	85.2	285	4 Q75942	Q75942 homo sapien
12	60	84.5	224	6 Q866U9	Q866U9 macrotus ca
13	59.5	83.8	181	6 Q97911	Q97911 budorcas ta
14	59.5	83.8	185	6 Q97694	Q97694 cervus nipu
15	59.5	83.8	195	6 Q97693	Q97693 canis lupus
16	59.5	83.8	195	6 Q97903	Q97903 addax nasom

17	59.5	83.8	197	11 Q811W6	Q811W6 sciurus vul
18	59.5	83.8	202	6 Q97696	Q97696 lama glama
19	59.5	83.8	202	6 Q97908	Q97908 capra nubia
20	59.5	83.8	204	6 Q97629	Q97629 odocoileus
21	59.5	83.8	204	6 Q9TS17	Q9TS17 odocoileus
22	59.5	83.8	204	6 Q9TS18	Q9TS18 odocoileus
23	59.5	83.8	209	6 Q9TV02	Q9TV02 camelus dro
24	59.5	83.8	211	6 Q77787	Q77787 antilocapra
25	59.5	83.8	212	6 Q97698	Q97698 cervus elap
26	59.5	83.8	213	6 Q9TV04	Q9TV04 canis fami
27	59.5	83.8	214	6 Q9TV03	Q9TV03 canis fami
28	59.5	83.8	215	11 Q811W3	Q811W3 spalax leuc
29	59.5	83.8	220	6 Q02825	Q02825 odocoileus
30	59.5	83.8	221	6 Q866V1	Q866V1 procavia ca
31	59.5	83.8	222	6 Q97913	Q97913 equus burch
32	59.5	83.8	222	6 Q866V5	Q866V5 hippopotamu
33	59.5	83.8	222	6 Q7YRX1	Q7YRX1 procyon lot
34	59.5	83.8	223	6 Q97910	Q97910 hippotragus
35	59.5	83.8	224	11 Q811W4	Q811W4 spalax leuc
36	59.5	83.8	226	6 Q97907	Q97907 gazella sub
37	59.5	83.8	226	6 Q866W5	Q866W5 elinaceus e
38	59.5	83.8	227	6 Q97964	Q97964 equus cabal
39	59.5	83.8	227	6 Q97906	Q97906 equus cabal
40	59.5	83.8	227	6 Q97909	Q97909 tragelaphus
41	59.5	83.8	235	6 Q97695	Q97695 giraffa cam
42	59.5	83.8	245	6 Q9MZU7	Q9MZU7 odocoileus
43	59.5	83.8	245	6 Q866W9	Q866W9 cynocephalu
44	59.5	83.8	247	6 Q866V7	Q866V7 equus cabal
45	59.5	83.8	247	11 Q811W7	Q811W7 sciurus vul

## ALIGNMENTS

## RESULT 1

ID Q811W5 PRELIMINARY; PRT; 212 AA.  
AC Q811W5;  
DT 01-JUN-2003 (TEMBLrel.. 24, Created)  
DT 01-JUN-2003 (TEMBLrel.. 24, Last sequence update)  
DT 01-OCT-2003 (TEMBLrel.. 25, Last annotation update)  
DE Prion protein (Fragment).  
GN PRNP.  
OS Cavia porcellus (Guinea pig).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Hystriocognathi; Caviidae; Cavia.  
OX NCBI\_TaxID=10141;  
RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=22408137; PubMed=12519913;  
RA van Rheede T., Smolenaars M.W., Madsen O., De Jong W.W.;  
RT "Molecular evolution of the mammalian prion protein.";  
RL Mol. Biol. Evol. 20:111-121(2003).  
DR EMBL; AI133839; AAM16493.1; ..  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF003377; prion; 1.  
DR Pfam; PF03391; Prion octapep; 5.  
DR PRINTS; PRO0341; PRION.  
DR SMART; SMO0157; PRP; 1.  
DR PROSITE; PS00281; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1 1  
FT NON\_TER 212 212  
SQ SEQUENCE 212 AA; 23265 MW; 8931918DBA5C44E5 CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 212;  
Best Local Similarity 93.3%; Pred. No. 0.0078; Mismatches 0; Indels 1; Gaps 1;  
Matches 14; Conservative 0;

QY 1 CWNITIKQTVTTT 14  
DB 145 CWNITIKQTVTTT 159

## RESULT 2

ID Q866W7 PRELIMINARY; PRT; 220 AA.

AC Q866W7;  
DT 01-JUN-2003 (TrEMBLrel. 24, Created)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Prion protein (Fragment).  
GN PRNP.

OS Ochotona princeps (Southern American pika).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Lagomorpha; Ochotoridae; Ochotona.  
OX NCBI\_TaxID=9978;

RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=2408137; PubMed=12519913;  
RA van Rheebe T., Smolenaars M.M., Madsen O., De Jong W.W.;  
RT "Molecular evolution of the mammalian prion protein.";  
RL Mol. Biol. Evol. 20:111-121(2003).

DR EMBL; AY133036; AAN16490.1; -.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR PRINTS; PR00341; Prion; 5.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1 220  
FT NON\_TER 1 220  
SQ SEQUENCE 220 AA; 23872 MW; 5318CF0B39F669 CRC64;

Query Match Best Local Similarity 85.2%; Score 60.5; DB 6; Length 220;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 154 CWNITIKQHTVTTTT 168

## RESULT 3

ID Q86XR1 PRELIMINARY; PRT; 238 AA.

AC Q86XR1;  
DT 01-JUN-2003 (TrEMBLrel. 24, Created)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Prion protein (Fragment).  
GN PRNP.

OS Homo sapiens (Human).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.  
OX NCBI\_TaxID=9606;

RN [1]  
RP SEQUENCE FROM N.A.  
RX Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;  
RT "Polymorphisms of the prion protein gene in Korea.";  
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AY219882; AAO83635.1; -.

DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR PRINTS; PR00341; Prion; 5.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1 238  
FT NON\_TER 1 238  
SQ SEQUENCE 238 AA; 26108 MW; ECGFA42623F3BBAE CRC64;

Query Match 85.2%; Score 60.5; DB 4; Length 238;

Best Local Similarity 93.3%; Pred. No. 0.0087;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 164 CWNITIKQHTVTTTT 178

## RESULT 4

ID Q8VHV4 PRELIMINARY; PRT; 240 AA.

AC Q8VHV4;  
DT 01-MAR-2002 (TrEMBLrel. 20, Created)  
DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)  
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
DE Prion protein (Fragment).  
GN PRP.

OS Microtus agrestis (Short-tailed field vole).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;  
OC Microtus.  
OX NCBI\_TaxID=29092;

RN [1]  
RP SEQUENCE FROM N.A.  
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,  
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;  
RT "Easy transmission of sheep scrapie to wild rodents questions the  
RT species barrier concept in the epidemiology of transmissible  
RT spongiform encephalopathies.";  
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF67625; AAL57232.1; -.

DR HSSP; P10279; IDWY.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR PRINTS; PR00341; Prion; 6.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1 240  
FT NON\_TER 1 240  
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match Best Local Similarity 85.2%; Score 60.5; DB 11; Length 240;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
DB 171 CWNITIKQHTVTTTT 185

## RESULT 5

ID P97895 PRELIMINARY; PRT; 243 AA.

AC P97895;  
DT 01-MAY-1997 (TrEMBLrel. 03, Created)  
DT 01-MAY-1997 (TrEMBLrel. 03, Last sequence update)  
DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
DE Scrapie prion (PRP 27-30) (Fragment).  
OS Mesocricetus auratus (Golden hamster).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;  
OC Mesocricetus.

OX NCBI\_TaxID=10036;

RN [1]  
RP SEQUENCE FROM N.A.  
RX MEDLINE=87108309; PubMed=3100471;  
RA McKinley M.P., Prusiner S.B.;  
RT "Biology and structure of scrapie prions.";  
RL Int. Rev. Neurobiol. 28:1-57(1986).  
RN [2]  
SQ SEQUENCE OF 79-223 FROM N.A.

RX MEDLINE=85176927; PubMed=2859120;  
 RA Oesch B., Westaway D., Maechli M., McKinley M.P., Kent S.B.,  
 RA Aebersold R.H., Barry R.A., Tempst P., Teplow D.B., Hood L.E.,  
 RA Prusiner S.B., Weissmann C.;  
 RT "A cellular gene encodes scrapie PrP 27-30 protein."  
 RL Cell 40:735-746(1985).  
 DR EMBL; M37381; AAA37090.1; -  
 DR EMBL; K02234; AAA37093.1; -  
 DR HSSP; P04273; 1B10.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion.  
 FT NON TER  
 SQ SEQUENCE 243 AA; 26643 MW; 4F53612BBFF240F9 CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 243;  
 Best Local Similarity 93.3%; Pred. No. 0.0089;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14  
 |||||  
 DB 168 CWNITIKOHTVTTTT 182

RESULT 6  
 Q8VHV5 PRELIMINARY; PRT; 248 AA.  
 ID Q8VHV5;  
 AC Q8VHV5;  
 DT 01-MAR-2002 (TrEMBLrel. 20, Created)  
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Clethrionomys glareolus (Bank vole).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;  
 CC Clethrionomys;  
 CC NCBI\_TaxID=51090;  
 RN (1)  
 RP SEQUENCE FROM N.A.  
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,  
 RA Di Garbo G., Kretzschmar H.A., Wolfer D.P., Ipp H.P.;  
 RT "Easy transmission of sheep scrapie to wild rodents questions the  
 RT species barrier concept in the epidemiology of transmissible  
 RT sporadic encephalopathies."  
 RL Submitted (Apr-2001) to the EMBL/Genbank/DBJ databases.  
 DR EMBL; AF367624; AAL57231.1; -  
 DR HSSP; P10279; 1DWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON TER  
 SQ SEQUENCE 248 AA; 27259 MW; 815E64EC2773C2C CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 248;  
 Best Local Similarity 93.3%; Pred. No. 0.0091;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14  
 |||||  
 DB 179 CWNITIKOHTVTTTT 193

RESULT 7

Q9Z0T5  
 ID Q9Z0T5 PRELIMINARY; PRT; 253 AA.  
 AC Q9Z0T5;  
 DT 01-MAY-1999 (TrEMBLrel. 10, Created)  
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;  
 CC Meriones.  
 CC NCBI\_TaxID=10047;  
 RN (1)  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Brain;  
 RX MEDLINE=93033687; PubMed=10373359;  
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Scharzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 RT of flexible regions of the prion protein."  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF117314; AAD19985.1; -  
 DR HSSP; P04925; 1AG2.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON TER  
 SQ SEQUENCE 253 AA; 27747 MW; B44D16667A97307F CRC64;

Query Match 85.2%; Score 60.5; DB 11; Length 253;  
 Best Local Similarity 93.3%; Pred. No. 0.0093;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKO-TVTTTT 14  
 |||||  
 DB 178 CWNITIKOHTVTTTT 192

RESULT 8  
 Q866W8 PRELIMINARY; PRT; 254 AA.  
 ID Q866W8;  
 AC Q866W8;  
 DT 01-JUN-2003 (TrEMBLrel. 24, Created)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)  
 DT 01-OCT-2003 (TrEMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRNP.  
 OS Tupia tana (large tree shrew).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Scandentia; Tupaiidae; Tupaias.  
 CC NCBI\_TaxID=70687;  
 RN (1)  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE=22408137; PubMed=12519913;  
 RX van Rheede T., Smolemans W.M., Madsen O., De Jong W.W.;  
 RT "Molecular evolution of the mammalian prion protein."  
 RL Mol. Biol. Evol. 20:111-121(2003).  
 DR EMBL; AY133035; AAN16489.1; -  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON TER  
 SQ SEQUENCE 254 AA; 27540 MW; 73F2944908135183 CRC64;



OC Mammalia; Eutheria; Macroscelidea; Macroscelididae; Macroscelides.  
 OK NCBI\_TaxID=29082;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=22408137; PubMed=12519913;  
 RA van Rieede T., Smolenaar M.W., Madsen O., De Jong W.W.;  
 RT "Molecular evolution of the mammalian prion protein.";  
 RL Mol. Biol. Evol. 20:111-121(2003).  
 DR EMBL; AY13059; AAN16513.1;  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 224 224  
 SQ SEQUENCE 224 AA; 23856 MW; 52C11DC1286F849B CRC64;

Query Match 84.5%; Score 60; DB 6; Length 224;  
 Best Local Similarity 85.7%; Pred. No. 0.01;  
 Matches 12; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 1 CVNITIKQTVTTT 14  
 |||||  
 DB 159 CVNITIKQHTTTT 172

## RESULT 13

097911 PRELIMINARY; PRT; 181 AA.  
 ID 097911;  
 AC 097911;  
 DT 01-MAY-1999 (TRENBLREL. 10, Created)  
 DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
 DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Budorcas taxicolor (taklin).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 CC Bovidae; Caprinae; Budorcas.  
 OK NCBI\_TaxID=37181;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RC TISSUE=Peripheral blood leukocytes;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Scharzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF117326; AAD1997.1; --  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 181 181  
 SQ SEQUENCE 181 AA; 19253 MW; A9001D08642E92A CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 181;  
 Best Local Similarity 86.7%; Pred. No. 0.01;  
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CVNITIKQTVTTT 14  
 |||||  
 DB 155 CVNITIKQHTTTT 169

## RESULT 14

097694 PRELIMINARY; PRT; 185 AA.  
 ID 097694;  
 AC 097694;  
 DT 01-MAY-1999 (TRENBLREL. 10, Created)  
 DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
 DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Cervus nippon dybowskii.  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;  
 CC Cervidae; Cervinae; Cervus.  
 OK NCBI\_TaxID=88066;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=97317556; PubMed=9174569;  
 RA Scharzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;  
 RT "Is codon 129 of prion protein polymorphic in human beings but not in  
 animals?"  
 RL Lancet 349:1603-1604(1997).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Scharzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF119941; AAD13289.1; --  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 185 185  
 SQ SEQUENCE 185 AA; 19870 MW; BB87C7658BC66E79 CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 185;  
 Best Local Similarity 86.7%; Pred. No. 0.01;  
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CVNITIKQTVTTT 14  
 |||||  
 DB 158 CVNITIKQHTTTT 172

RESULT 15

097693 PRELIMINARY; PRT; 195 AA.  
 ID 097693;  
 AC 097693;  
 DT 01-MAY-1999 (TRENBLREL. 10, Created)  
 DT 01-MAY-1999 (TRENBLREL. 10, Last sequence update)  
 DT 01-OCT-2003 (TRENBLREL. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Canis lupus (Gray wolf).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.  
 OK NCBI\_TaxID=9612;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Scharzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation  
 of flexible regions of the prion protein.";  
 RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF119939; AAD12063.1; --  
 DR HSSP; P04925; IAGZ.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.

DR SWART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1  
 FT NON\_TER 195  
 SQ SEQUENCE 195 AA; 21097 MM; 9D18E4EB9AA5D031 CRC64;

Query Match 83.8%; Score 59.5; DB 6; Length 195;  
 Best Local Similarity 86.7%; Pred. No. 0.011;  
 Matches 13; Conservative 1; Mismatches 0; Indels 1; Gaps 1;

Oy 1 CWNITIKO-TVTTT 14  
 |||||:  
 Db 142 CWNITVKNHTVTTT 156

Search completed: April 30, 2004, 15:31:22  
 Job time : 30.4583 secs

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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 6.70833 Seconds

(without alignments)  
108,668 Million cell updates/sec

Title: US-09-603-832-6

Sequence: 1 CVNITIKQVTTT 14

Scoring table: ELOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database: SwissProt\_42.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	60.5	85.2	232 1	P40246 atelae geof
2	60.5	85.2	238 1	P40246 cercoceph
3	60.5	85.2	238 1	P40246 cercoceph
4	60.5	85.2	239 1	P40246 actus trivi
5	60.5	85.2	241 1	P40248 callicebus
6	60.5	85.2	241 1	P40255 mandillius
7	60.5	85.2	245 1	P40250 cercoceph
8	60.5	85.2	246 1	P40250 cercoceph
9	60.5	85.2	246 1	P40250 cercoceph
10	60.5	85.2	246 1	P40250 cercoceph
11	60.5	85.2	252 1	P40250 cercoceph
12	60.5	85.2	252 1	P40250 cercoceph
13	60.5	85.2	252 1	P40250 cercoceph
14	60.5	85.2	253 1	P40250 cercoceph
15	60.5	85.2	253 1	P40250 cercoceph
16	60.5	85.2	253 1	P40250 cercoceph
17	60.5	85.2	253 1	P40250 cercoceph
18	60.5	85.2	253 1	P40250 cercoceph
19	60.5	85.2	253 1	P40250 cercoceph
20	60.5	85.2	253 1	P40250 cercoceph
21	60.5	85.2	254 1	P40250 cercoceph
22	60.5	85.2	254 1	P40250 cercoceph
23	60.5	85.2	254 1	P40250 cercoceph
24	60.5	85.2	254 1	P40250 cercoceph
25	60.5	85.2	254 1	P40250 cercoceph
26	60.5	85.2	254 1	P40250 cercoceph
27	60.5	85.2	254 1	P40250 cercoceph
28	60.5	85.2	255 1	P40250 cercoceph
29	60.5	85.2	255 1	P40250 cercoceph
30	60.5	85.2	256 1	P40250 cercoceph
31	60.5	85.2	256 1	P40250 cercoceph
32	60.5	85.2	256 1	P40250 cercoceph
33	60.5	85.2	256 1	P40250 cercoceph

## ALIGNMENTS

RESULT 1	ID	PRIOR_ATEGE	STANDARD	PRT	232 AA
AC	P40246	01-FEB-1995 (Rel. 31, Created)			
DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	15-MAR-2004 (Rel. 43, Last annotation update)				
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).				
GN	PrP.				
OS	Atelae geoffroyi (Black-handed spider monkey).				
OC	Bukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.				
OX	NCBI_TaxID:9509;				
RP	SEQUENCE FROM N.A.				
RY	MEDLINE:95139065; PubMed:7837269;				
RA	Schätzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RL	J. Mol. Biol. 245:362-374(1995).				
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.				
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rod".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: Belongs to the prion family.				
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CC	EMBL: U08309; AAC50097.1; -.				
DR	PIR: S71041; S71041.				
DR	HSSP: P04156; IEIG.				
DR	InterPro: IPR000817; Prion.				
DR	Pfam: PF00377; prion. 1.				
DR	Pfam: PF03991; prionoctapep; 5.				
DR	PRINTS: PR0341; PRION.				
DR	SMART: SM00157; PRP. 1.				
DR	PROSITE: PS00291; PRION 1; 1.				
DR	PROSITE: PS00706; PRION 2; 1.				
KW	Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.				
FT	NON TER				
FT	SIGNAL				
FT	CHAIN				
FT	PROPEP				
FT	LIPID				

BY SIMILARITY:  
MAJOR PRION PROTEIN.  
REMOVED IN MAJORITY FORM (BY SIMILARITY).  
GPI-anchor amidated serine (By similarity).



FT DISULFID 163 198 BY SIMILARITY  
 FT CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 181 165 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 84 4 X 8 AA TANDEN REPEATS OF P-H-G-G-W-G-  
 Q.  
 FT REPEAT 44 51 1.  
 FT REPEAT 52 59 2.  
 FT REPEAT 60 67 3.  
 FT REPEAT 68 75 4.  
 FT NON\_TER 232 232  
 SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05C64A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 232;  
 Best Local Similarity 93.3%; Pred. No. 0.00095;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 163 CWNITIKQTVTTTT 177

## RESULT 2

PRIO\_CERAT STANDARD; PRT; 238 AA.

AC Q95145; Q95200;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus aethiops, and  
 OS Macaca sylvanus (Barbary ape).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecidae;  
 NC NCBI\_TaxID=36222, 9546;  
 RN [1]

RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudemits J.;  
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U75384; AAB50623.1; -;  
 DR EMBL; U75382; AAB50629.1; -;

DR HSSP; P04925; IAG2.  
 DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion, octapep; 5.

DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.

DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.

KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 FT NON\_TER 1 1  
 FT SIGNAL <1 15 BY SIMILARITY.

FT CHAIN 16 215 MAJOR PRION PROTEIN.  
 FT PROPEP 216 238 REMOVED IN MATURE FORM (BY SIMILARITY).  
 FT LIPID 215 215 GPI-anchor amidated serine (By  
 FT similarity).  
 FT DISULFID 164 199 BY SIMILARITY.  
 FT CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 FT DOMAIN 44 76 4 X 8 AA TANDEN REPEATS OF P-H-G-G-W-G-  
 Q.  
 FT REPEAT 44 52 1.  
 FT REPEAT 53 60 2.  
 FT REPEAT 61 68 3.  
 FT REPEAT 69 76 4.  
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EB3E3531B CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 238;  
 Best Local Similarity 93.3%; Pred. No. 0.00097;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 164 CWNITIKQTVTTTT 178

## RESULT 3

PRIO\_THEGE STANDARD; PRT; 238 AA.

AC Q95270;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).  
 GN PRNP OR PRP.  
 OS Theropithecus gelada (Gelada baboon).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Theropithecus.  
 NC NCBI\_TaxID=9565;  
 RN [1]

RP SEQUENCE FROM N.A.

RA der Kuyt A.C., Dekker J.T., Goudemits J.;  
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U75383; AAB50630.1; -;  
 DR HSSP; P04925; IAG2.

DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion, octapep; 5.  
 DR PRINTS; PR00341; PRION.

DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1 1

```

FT SIGNAL <1 15 BY SIMILARITY.
FT CHAIN 16 >238 MAJOR PRION PROTEIN.
FT DISULFID 164 199 BY SIMILARITY.
FT CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 44 52 O.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT NON TER 238 238 4.
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF60243EDB CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 238;
Best Local Similarity 93.3%; Pred. No. 0.00097;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 CWNITIKO-TVTTTT 14
Db 164 CWNITIKOHTVTTTT 178

RESULT 4
PRIO_AOTTR STANDARD; PRT; 239 AA.
ID PRIO_AOTTR
AC P40245;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Aotus trivirgatus (Night monkey) (Doutroucouli).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.
OC NCBI_TaxID=9505;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08293; AAC50082.1; -
DR PIR; S53633; S53633.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; prion; 1.
DR PRINTS; PR00341; Prion.
DR SMART; SM00157; Prp; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal.

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FT NON TER 1 1
FT SIGNAL <1 15 BY SIMILARITY.
FT CHAIN 16 >239 MAJOR PRION PROTEIN.
FT DISULFID 171 206 BY SIMILARITY.
FT CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
FT REPEAT 44 51 O.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT NON TER 239 239 5.
SQ SEQUENCE 239 AA; 26246 MW; 2EFB77E354B7024A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 239;
Best Local Similarity 93.3%; Pred. No. 0.00098;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

Qy 1 CWNITIKO-TVTTTT 14
Db 171 CWNITIKOHTVTTTT 185

RESULT 5
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Callipeus moloch (Dusky ticl).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callicebinae;
OC Callicebinae.
OC NCBI_TaxID=9523;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08312; AAC50100.1; -
DR PIR; S71048; S71048.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; prion; 1.
DR PRINTS; PR00341; Prion.
DR SMART; SM00157; Prp; 1.

```

DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal.  
 FT NON\_TER 1  
 FT SIGNAL <1 15  
 FT CHAIN 16 >241  
 FT DISULFID 172 207  
 FT CARBOHYD 174 174  
 FT CARBOHYD 190 190  
 FT DOMAIN 44 84  
 FT REPEAT 44 52  
 FT REPEAT 53 60  
 FT REPEAT 61 68  
 FT REPEAT 69 76  
 FT REPEAT 77 84  
 FT NON\_TER 241 241  
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;  
 Query Match 85.2%; Score 60.5; DB 1; Length 241;  
 Best Local Similarity 93.3%; Pred. No. 0.00099;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 QY 1 CWNITIKQ-TVTTTT 14  
 DB 172 CWNITIKQHTVTTTT 186  
 RESULT 6  
 PRIO\_MANSF STANDARD; PRT; 241 AA.  
 AC P40255;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP  
 OS Mandillus sphinx (Mandril) (Papio sphinx).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Mandillus.  
 OX NCBI\_TaxID=9561;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "folds".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC EMBL; J08303; AAC50091.1; -  
 CC PIR; S71056; S71056.  
 CC HSSP; P04925; IAG3.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion; 1.

DR Pfam; PF03991; Prion octapep; 6.  
 DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 FT NON\_TER 1  
 FT SIGNAL <1 15  
 FT CHAIN 16 >241  
 FT PROPEP 224 224  
 FT LIPID 223 223  
 FT DISULFID 172 207  
 FT CARBOHYD 174 174  
 FT CARBOHYD 190 190  
 FT DOMAIN 44 84  
 FT REPEAT 44 52  
 FT REPEAT 53 60  
 FT REPEAT 61 68  
 FT REPEAT 69 76  
 FT REPEAT 77 84  
 FT NON\_TER 241 241  
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B2B59DE CRC64;  
 Query Match 85.2%; Score 60.5; DB 1; Length 241;  
 Best Local Similarity 93.3%; Pred. No. 0.00099;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 QY 1 CWNITIKQ-TVTTTT 14  
 DB 172 CWNITIKQHTVTTTT 186  
 RESULT 7  
 PRIO\_CERAE STANDARD; PRT; 245 AA.  
 AC P40250;  
 DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).  
 GN PRNP  
 OS Cercopithecus aethiops (Green monkey) (Grivet), and  
 OS Cercopithecus diana (Diana monkey).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 OC Cercopithecinae; Cercopithecus.  
 OX NCBI\_TaxID=9534, 36224;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "folds".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC EMBL; J08303; AAC50091.1; -  
 CC PIR; S71056; S71056.  
 CC HSSP; P04925; IAG3.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; prion; 1.

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CC EMBL; U08291; AAC50080.1; -  
 CC EMBL; U08292; AAC50081.1; -  
 CC PIR; S53627; S53627.  
 CC PIR; S71045; S71045.  
 CC HSSP; P04925; IAG2.  
 CC InterPro; IPR000817; Prion.  
 CC Pfam; PF00377; Prion; 1.  
 CC Pfam; PF03991; Prion; octapep; 5.  
 CC PRINTS; PR00341; PRION.  
 CC SMART; SM00157; PRP; 1.  
 CC PROSITE; PS00291; PRION\_1; 1.  
 CC PROSITE; PS00706; PRION\_2; 1.  
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 CC SIGNAL 1 22 BY SIMILARITY.  
 CC CHAIN 23 222 MAJOR PRION PROTEIN.  
 CC PROPEP 223 245 REMOVED IN MATURE FORM (BY SIMILARITY).  
 CC LIPID 222 222 GPI-anchor amidated serine (By similarity).  
 CC DISULFID 171 206 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC DOMAIN 51 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-Q.  
 CC REPEAT 51 59 1.  
 CC REPEAT 60 67 2.  
 CC REPEAT 68 75 3.  
 CC REPEAT 76 83 4.  
 CC SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 245;  
 Best Local Similarity 93.3%; Pred. No. 0.001;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTT 14  
 Db 171 CWNITIKQHTVTTT 185

RESULT 8  
 PRIO\_CERMO STANDARD; PRT; 246 AA.  
 ID PRIO\_CERMO  
 AC Q95172; Q95173;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus mona, and  
 OS Cercopithecus neglectus.  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 CC Cercopithecinae; Cercopithecus.  
 CC NCBI\_TaxID=36226, 36227;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).

CC EMBL; U75386; AAB50625.1; -  
 CC EMBL; U75387; AAB50626.1; -  
 CC HSSP; P04925; IAG2.  
 CC InterPro; IPR000817; Prion.  
 CC Pfam; PF00377; prion; 1.  
 CC Pfam; PF03991; Prion; octapep; 6.  
 CC PRINTS; PR00341; PRION.  
 CC SMART; SM00157; PRP; 1.  
 CC PROSITE; PS00291; PRION\_1; 1.  
 CC PROSITE; PS00706; PRION\_2; 1.  
 CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 CC KW Prion; 1  
 CC FT SIGNAL 1 15 BY SIMILARITY.  
 CC FT CHAIN 16 223 MAJOR PRION PROTEIN.  
 CC FT PROPEP 224 246 REMOVED IN MATURE FORM (BY SIMILARITY).  
 CC FT LIPID 223 223 GPI-anchor amidated serine (By similarity).  
 CC FT DISULFID 172 207 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).  
 CC FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-Q.  
 CC FT REPEAT 44 52 1.  
 CC FT REPEAT 53 60 2.  
 CC FT REPEAT 61 76 3.  
 CC FT REPEAT 69 76 4.  
 CC FT REPEAT 77 84 5.  
 CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 85.2%; Score 60.5; DB 1; Length 246;  
 Best Local Similarity 93.3%; Pred. No. 0.001;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTT 14  
 Db 172 CWNITIKQHTVTTT 186

RESULT 9  
 PRIO\_CERPA STANDARD; PRT; 246 AA.  
 ID PRIO\_CERPA  
 AC Q95174;  
 DT 01-NOV-1997 (Rel. 35, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).  
 GN PRNP.  
 OS Cercopithecus parus.  
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;  
 CC Cercopithecinae; Cercopithecus.  
 CC NCBI\_TaxID=27677;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;  
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.  
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.

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CC or send an email to license@sib-sib.ch).
CC -----
CC DR EMBL; U75388; AAB50627.1; -.
CC DR HSSP; P04925; IAG2.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; prion.1.
CC DR Pfam; PF03991; Prion octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PRP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT NON_TER 1 15
CC FT SIGNAL 16 223
CC FT CHAIN 16 223
CC FT PROPEP 224 246
CC FT LIPID 223 223
CC FT DISULFID 172 207
CC FT CARBOHYD 174 174
CC FT CARBOHYD 190 190
CC FT DOMAIN 44 84
CC FT REPEAT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 77 84
CC FT REPEAT 77 84
CC SQ SEQUENCE 246 AA; 26886 MM; D3SD105BEC53108 CRC64;
CC
CC Query Match 85.2%; Score 60.5; DB 1; Length 246;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC
CC QY 1 CWNITIKQ-TVTTT 14
CC Db 172 CWNITIKQHTVTTT 186
CC
CC RESULT 10
CC PRIO_CERTO STANDARD; PRT; 246 AA.
CC ID PRIO_CERTO
CC AC 095176;
CC DT 01-NOV-1997 (Rel. 35, Created)
CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (Prp27-30) (P-Prp3-35C) (Fragment).
CC GN PRNP.
CC OS Cercopithecus torquatus ayes (Red-crowned mangabey) (Sooty mangabey).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC OC Cercopithecidae; Cercopithecus.
CC OC NCBITaxID=9531;
CC OX NCBITaxID=9531;
CC RN [1]
CC RP SEQUENCE FROM N.A.
CC RA der Kuyil A.C., Dekker J.T., Goudarzi J.;
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC CC -1- DISEASE: Prp is FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRETZFEITZ-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

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CC CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@sib-sib.ch).
CC -----
CC DR EMBL; U75385; AAB50628.1; -.
CC DR HSSP; P04925; IAG2.
CC DR InterPro; IPR000817; Prion.
CC DR Pfam; PF00377; prion.1.
CC DR Pfam; PF03991; Prion octapep; 6.
CC DR PRINTS; PR00341; PRION.
CC DR SMART; SM00157; PRP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC FT NON_TER 1 15
CC FT SIGNAL 16 223
CC FT CHAIN 16 223
CC FT PROPEP 224 246
CC FT LIPID 223 223
CC FT DISULFID 172 207
CC FT CARBOHYD 174 174
CC FT CARBOHYD 190 190
CC FT DOMAIN 44 84
CC FT REPEAT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 77 84
CC FT REPEAT 77 84
CC SQ SEQUENCE 246 AA; 26914 MM; F58679CBBEC5ADCT CRC64;
CC
CC Query Match 85.2%; Score 60.5; DB 1; Length 246;
CC Best Local Similarity 93.3%; Pred. No. 0.001;
CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC
CC QY 1 CWNITIKQ-TVTTT 14
CC Db 172 CWNITIKQHTVTTT 186
CC
CC RESULT 11
CC PRIO_ATEPA STANDARD; PRT; 252 AA.
CC ID PRIO_ATEPA
CC AC P51446;
CC DT 01-OCT-1996 (Rel. 34, Created)
CC DT 01-OCT-1996 (Rel. 34, Last sequence update)
CC DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
CC GN PRNP.
CC OS Ateles paniscus (Black spider monkey).
CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
CC OC NCBITaxID=9510;
CC OX NCBITaxID=9510;
CC RN [1]
CC RP SEQUENCE FROM N.A.
CC RA TISSUE=Brain;
CC MEDLINE=95083661; PubMed=7991600;
CC RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Pettrone K.,
CC Rubenstein R., Dunlick M., Gibbs C.J., Gajdusek D.C.;
CC "Infectious amyloid precursor gene sequences in primates used for
CC RT experimental transmission of human spongiform encephalopathy.";
CC RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
CC CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC      ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC      CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC      (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC      TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC      -1- SIMILARITY: Belongs to the prion family.
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CC      or send an email to license@isb-sib.ch).
CC      -----
CC      DR EMBL, U0164; AAA68634.1; -.
CC      DR HSSP, P04156; 1E1G.
CC      DR InterPro, IPR000817; Prion.
CC      DR Pfam, PF00377; prion; 1.
CC      DR PRINTS, PR00391; Prion, octapep; 6.
CC      DR SMART, SM00157; PRP; 1.
CC      DR PROSITE, PS00291; PRION_1; 1.
CC      DR PROSITE, PS00706; PRION_2; 1.
CC      DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC      FT SIGNAL 1 22
CC      FT CHAIN 23 229
CC      FT PROPEP 230 252
CC      FT LIPID 229 229
CC      FT DISULFID 178 213
CC      FT CARBOHYD 180 180
CC      FT CARBOHYD 196 196
CC      FT DOMAIN 51 90
CC      FT REPEAT 51 58
CC      FT REPEAT 59 66
CC      FT REPEAT 67 74
CC      FT REPEAT 75 82
CC      FT REPEAT 83 90
CC      FT REPEAT 90 90
CC      SQ SEQUENCE 252 AA; 27718 MW; 20EA38A42DCC56D1 CRC64;
CC      Query Match 85.2%; Score 60.5; DB 1; Length 252;
CC      Best Local Similarity 93.3%; Pred. No. 0.001; Mismatches 0; Indels 1; Gaps 1;
CC      Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC      QY 1 CWNITIKQ-TVTTTT 14
CC      DB 178 CWNITIKQHTVTTTT 192
CC      RESULT 12
CC      ID PRIO_CALJA STANDARD; PRT; 252 AA.
CC      AC P40247;
CC      DT 01-FEB-1995 (Rel. 31, Created)
CC      DT 01-FEB-1995 (Rel. 31, Last sequence update)
CC      DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC      DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
CC      GN PRNP.
CC      OS Callithrix jacchus (Common marmoset).
CC      OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae;
CC      OC Callitrich.
CC      OC NCBI_TaxID=9483;
CC      RN [1]
CC      RP SEQUENCE FROM N.A.
CC      RA MEDLINE=95139066; PubMed=7837269;
CC      RT "Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
CC      J. Mol. Biol. 245:362-374(1995)."

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CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC      ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC      CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC      (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC      TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      -----
CC      DR EMBL, U08304; AAC50092.1; -.
CC      DR PIR, S53634; S53634.
CC      DR HSSP, P04925; 1AG2.
CC      DR InterPro, IPR000817; Prion.
CC      DR Pfam, PF00377; prion; 1.
CC      DR PRINTS, PR00341; PRION.
CC      DR SMART, SM00157; PRP; 1.
CC      DR PROSITE, PS00291; PRION_1; 1.
CC      DR PROSITE, PS00706; PRION_2; 1.
CC      DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
CC      FT SIGNAL 1 22
CC      FT CHAIN 23 229
CC      FT PROPEP 230 252
CC      FT LIPID 229 229
CC      FT DISULFID 178 213
CC      FT CARBOHYD 180 180
CC      FT CARBOHYD 196 196
CC      FT DOMAIN 51 90
CC      FT REPEAT 51 58
CC      FT REPEAT 59 66
CC      FT REPEAT 67 74
CC      FT REPEAT 75 82
CC      FT REPEAT 83 90
CC      FT REPEAT 90 90
CC      SQ SEQUENCE 252 AA; 27639 MW; B2800860F5C3664 CRC64;
CC      Query Match 85.2%; Score 60.5; DB 1; Length 252;
CC      Best Local Similarity 93.3%; Pred. No. 0.001; Mismatches 0; Indels 1; Gaps 1;
CC      Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
CC      QY 1 CWNITIKQ-TVTTTT 14
CC      DB 178 CWNITIKQHTVTTTT 192
CC      RESULT 13
CC      ID PRIO_CEBAP STANDARD; PRT; 252 AA.
CC      AC P40249;
CC      DT 01-FEB-1995 (Rel. 31, Created)
CC      DT 01-FEB-1995 (Rel. 31, Last sequence update)
CC      DT 15-MAR-2004 (Rel. 43, Last annotation update)
CC      DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
CC      GN PRNP.
CC      OS Cebus apella (Brown-capped capuchin).
CC      OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC      OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
CC      OC NCBI_TaxID=9515;
CC      RN [1]
CC      RP SEQUENCE FROM N.A.
CC      RA MEDLINE=95139066; PubMed=7837269;

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RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREATZFEILDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
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 CC -----  
 CC EMBL: U08295; AAC50084.1; -  
 CC PIR: S53631; S53631.  
 CC DR HSSP: P04156; 1B1G.  
 CC DR InterPro: IPR000817; Prion.  
 CC DR Pfam: PF00377; prion; 1.  
 CC DR PRINTS: PR00341; Prion.octapep; 6.  
 CC DR SMART: SM00157; PrP; 1.  
 CC DR PROSITE: PS00291; PRION\_1; 1.  
 CC DR PROSITE: PS00706; PRION\_2; 1.  
 CC KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 CC FT SIGNAL 1 22  
 CC FT CHAIN 23 229  
 CC FT PROPEP 230 252  
 CC FT LIPID 229 229  
 CC FT DISULFID 178 213  
 CC FT CARBOHYD 180 180  
 CC FT CARBOHYD 186 196  
 CC FT DOMAIN 51 90  
 CC FT REPEAT 51 58  
 CC FT REPEAT 59 66  
 CC FT REPEAT 67 74  
 CC FT REPEAT 75 82  
 CC FT REPEAT 83 90  
 CC FT REPEAT 90 91  
 CC SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;  
 CC Query Match 85.2%; Score 60.5; DB 1; Length 252;  
 CC Best Local Similarity 93.3%; Pred. No. 0.001; Mismatches 0; Indels 1; Gaps 1;  
 CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 CC  
 CC QY 1 CVAITIKQ-TVTTTT 14  
 CC DB 178 CVAITIKQHTVTTTT 192  
 CC  
 CC RESULT 14  
 CC PRO\_COLLU STANDARD; PRT; 253 AA.  
 CC AC P40251;  
 CC DT 01-FEB-1995 (Rel. 31, Created)  
 CC DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 CC DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).  
 CC PRNP.  
 CC OS Colobus guereza (Black-and-white colobus monkey).  
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Colobinae;  
 CC Colobus.

OX NCBI\_TaxID=33548;  
 RN [1]  
 RX SEQUENCE FROM N.A.  
 RX MEDLINE=95139065; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates.";  
 RL J. Mol. Biol. 245:362-374(1995).  
 CC [2]  
 CC SEQUENCE OF 8-253 FROM N.A.  
 CC der Kuyil A.C., Dekker J.T., Goudsmid J.;  
 CC Submitted (OCT-1996) to the EMBL/Genbank/DBJ databases.  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CREATZFEILDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
 CC -----  
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 CC -----  
 CC EMBL: U08297; AAC50086.1; -  
 CC EMBL: U75388; AAB50624.1; -  
 CC PIR: S53618; S53618.  
 CC DR HSSP: P04925; 1AG2.  
 CC DR InterPro: IPR000817; Prion.  
 CC DR Pfam: PF00377; prion; 1.  
 CC DR PRINTS: PR00341; Prion.octapep; 6.  
 CC DR SMART: SM00157; PrP; 1.  
 CC DR PROSITE: PS00291; PRION\_1; 1.  
 CC DR PROSITE: PS00706; PRION\_2; 1.  
 CC KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 CC FT SIGNAL 1 22  
 CC FT CHAIN 23 230  
 CC FT PROPEP 231 253  
 CC FT LIPID 230 230  
 CC FT DISULFID 179 214  
 CC FT CARBOHYD 181 181  
 CC FT CARBOHYD 197 197  
 CC FT DOMAIN 51 91  
 CC FT REPEAT 51 59  
 CC FT REPEAT 60 67  
 CC FT REPEAT 68 75  
 CC FT REPEAT 76 83  
 CC FT REPEAT 84 91  
 CC FT REPEAT 91 91  
 CC SQ SEQUENCE 253 AA; 27626 MW; 14B17477881F5316 CRC64;  
 CC Query Match 85.2%; Score 60.5; DB 1; Length 253;  
 CC Best Local Similarity 93.3%; Pred. No. 0.001; Mismatches 0; Indels 1; Gaps 1;  
 CC Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 CC  
 CC QY 1 CVAITIKQ-TVTTTT 14  
 CC DB 179 CVAITIKQHTVTTTT 193  
 CC  
 CC RESULT 15  
 CC PRO\_COLLU STANDARD; PRT; 253 AA.  
 CC AC P40252; Q28419;

DT 01-FEB-1995 (Rel. 31, Created)  
 DT 01-FEB-1995 (Rel. 31, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (PrP) (PrP27-30) (P-P33-35C).  
 GN PRNP.  
 OS Gorilla gorilla gorilla (lowland gorilla).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Gorilla.  
 OX NCBI\_TaxID=9595;  
 RN [1]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE=95139066; PubMed=7837269;  
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;  
 RT "Prion protein gene variation among primates."; J. Mol. Biol. 245:362-374(1995).  
 RL [2]  
 RN SEQUENCE FROM N.A.  
 RP TISSUE=Blood;  
 RC MEDLINE=95083661; PubMed=7891600;  
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,  
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;  
 RT "Infectious amyloid precursor gene sequences in primates used for  
 experimental transmission of human spongiform encephalopathy."; Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).  
 CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -!- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND  
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,  
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -!- SIMILARITY: Belongs to the prion family.  
 CC  
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 CC  
 CC -----  
 DR EMBL, U08300; AAC50089.1; -;  
 DR EMBL, U05166; AAA68633.1; -;  
 DR PIR, I37032; I37032.  
 DR PIR, S53614; S53614.  
 DR HSSP, P04156; IOL2.  
 DR InterPro, IPR000817; Prion.  
 DR Pfam, PF00377; prion; 1.  
 DR Pfam, PF03991; Prion octapep; 6.  
 DR PRINTS, PR00341; PRION.  
 DR SMART, SMO0157; PrP; 1.  
 DR PROSITE, PS00291; PRION\_1; 1.  
 DR PROSITE, PS00706; PRION\_2; 1.  
 KW Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
 FT SIGNAL 1 22  
 FT CHAIN 23 230  
 FT PROPEP 231 253  
 FT LIPID 230 250  
 FT  
 FT DISULFID 179 214  
 FT CARBOHYD 181 197  
 FT CARBOHYD 197 197  
 FT DOMAIN 51 91  
 FT  
 FT REPEAT 51 59  
 FT REPEAT 60 67  
 FT REPEAT 68 75  
 FT REPEAT 76 83  
 FT REPEAT 84 91  
 FT  
 FT CONFLICT 6 6 C -> Y (IN REF. 2).

SQ SEQUENCE 253 AA; 27660 MW; E28F4C3FAABCA49E CRC64;  
 Query Match 85.2%; Score 60.5; DB 1; Length 253;  
 Best Local Similarity 93.3%; Pred. No. 0.001; Mismatches 0; Indels 1; Gaps 1;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 QY 1 CWNITIKQ-TVTTT 14  
 Db 179 CWNITIKQHTVTTT 193

Search completed: April 30, 2004, 15:29:28  
 Job time: 7.70833 secs



GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 10.2083 Seconds  
(without alignments) 131.920 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CWNITIKQTVTTT 14

Scoring table: BIOSUN62

Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : PIR\_78:\*

1: p1r1:\*

2: p1r2:\*

3: p1r3:\*

4: p1r4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	226	A53892	prion-related prot
2	60.5	85.2	232	S71041	major prion protei
3	60.5	85.2	239	S53633	major prion protei
4	60.5	85.2	241	S71056	major prion protei
5	60.5	85.2	241	S71056	major prion protei
6	60.5	85.2	245	S53627	major prion protei
7	60.5	85.2	245	S71045	major prion protei
8	60.5	85.2	252	S53634	major prion protei
9	60.5	85.2	252	S53631	major prion protei
10	60.5	85.2	253	U7HU	major prion protei
11	60.5	85.2	253	S71032	major prion protei
12	60.5	85.2	253	S53635	prion protein - si
13	60.5	85.2	253	S53635	prion protein - si
14	60.5	85.2	253	S53635	prion protein - si
15	60.5	85.2	253	S53635	prion protein - si
16	60.5	85.2	253	S53635	prion protein - si
17	60.5	85.2	253	S53635	prion protein - si
18	60.5	85.2	253	S53635	prion protein - si
19	60.5	85.2	253	S53635	prion protein - si
20	60.5	85.2	253	S53635	prion protein - si
21	60.5	85.2	253	S53635	prion protein - si
22	60.5	85.2	253	S53635	prion protein - si
23	60.5	85.2	253	S53635	prion protein - si
24	60.5	85.2	253	S53635	prion protein - si
25	60.5	85.2	253	S53635	prion protein - si
26	60.5	85.2	253	S53635	prion protein - si
27	60.5	85.2	253	S53635	prion protein - si
28	60.5	85.2	253	S53635	prion protein - si
29	60.5	85.2	253	S53635	prion protein - si

30	59.5	83.8	252	2	161848	major prion protei
31	59.5	83.8	252	2	UC6175	prion protein - ra
32	59.5	83.8	256	2	S37149	major prion protei
33	59.5	83.8	256	2	A54281	major prion protei
34	59.5	83.8	257	2	U01900	major prion protei
35	59.5	83.8	260	2	S53629	major prion protei
36	59.5	83.8	264	2	S37127	prion protein - gr
37	59.5	79.6	256	2	U02668	major prion protei
38	56.5	79.6	264	2	A54330	major prion protei
39	41	57.7	400	2	T32705	hypothetical prote
40	41	57.7	738	2	E66294	hypothetical prote
41	41	57.7	745	2	G72453	hypothetical prote
42	40	56.3	746	2	H66330	probable cyclic nu
43	39	54.9	144	2	AH1997	hypothetical prote
44	39	54.9	906	2	S03313	hypothetical prote
45	38	53.5	176	2	T26212	hypothetical prote

## ALIGNMENTS

RESULT 1  
A53892  
prion-related protein - rat (fragment)  
C/Species: Rattus norvegicus (Norway rat)  
C/Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 13-Aug-1999  
C/Accession: A53892  
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.  
Lab. Invest. 57, 370-374, 1987  
A/Title: Cloning of rat "prion-related protein" cDNA.  
A/Reference number: A53892; MUID:88037055; PMID:2889848  
A/Accession: A53892  
A/Status: preliminary  
A/Molecule type: mRNA  
A/Residues: 1-226 <LIA>  
A/Cross-references: GB:M20313; NID:G206391; PID:AAA1947.1; PID:G206392  
C/Superfamily: major prion protein

Query Match 85.2% Score 60.5; DB 2; Length 226;  
Best Local Similarity 93.3%; Pred. No. 0.0037;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQTVTTT 14  
DB 151 CWNITIKQTVTTT 165

## RESULT 2

S71041  
major prion protein - black-handed spider monkey (fragment)

C/Species: Atelus geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003

C/Accession: S71041; S53630

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: EMBL:U08309; NID:G474376; PIN:AA60097.1; PID:G474377

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, R, 196-231 <SCM>

A/Cross-references: EMBL:U08309

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2% Score 60.5; DB 2; Length 232;

Best Local Similarity 93.3%; Pred. No. 0.0038;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
|||||  
Db 163 CWNITIKQHTVTTTT 177

## RESULT 3

major prion protein - douroucoulli (fragment)  
C/Species: Aotus f. virgatus (douroucoulli, night monkey, owl monkey)  
C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
C/Accession: S53633; S71042  
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A/Title: Prion protein gene variation among primates.  
A/Reference number: S53614; MUID:95139066; PMID:7837269  
A/Accession: S53633  
A/Status: nucleic acid sequence not shown  
A/Molecule type: DNA  
A/Residues: 1-239 <SCH>  
A/Cross-references: EMBL:U08293  
R/Schaezel, H.M.  
submitted to the EMBL Data Library, April 1994  
A/Reference number: S71041  
A/Accession: S71042  
A/Molecule type: DNA  
A/Residues: 1-202, 'E', 204-239 <SCW>  
A/Cross-references: EMBL:U08293; NID:9474344; PIDN:AAC50082.1; PID:9474345  
C/Superfamily: major prion protein  
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 239;  
Best Local Similarity 93.3%; Pred. No. 0.0039;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
|||||  
Db 171 CWNITIKQHTVTTTT 185

## RESULT 4

major prion protein - mandrill (fragment)  
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)  
C/Date: 27-Oct-1996 #sequence\_revision 14-Feb-1997 #text\_change 11-Aug-2003  
C/Accession: S71056; S53621  
R/Schaezel, H.M.  
submitted to the EMBL Data Library, April 1994  
A/Reference number: S71041  
A/Accession: S71056  
A/Molecule type: DNA  
A/Residues: 1-241 <SCH>  
A/Cross-references: EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:9474365  
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A/Title: Prion protein gene variation among primates.  
A/Reference number: S53614; MUID:95139066; PMID:7837269  
A/Accession: S53621  
A/Status: nucleic acid sequence not shown  
A/Molecule type: DNA  
A/Residues: 1-203, 'R', 205-240 <SCW>  
A/Cross-references: EMBL:U08303  
C/Superfamily: major prion protein  
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;  
Best Local Similarity 93.3%; Pred. No. 0.0039;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
|||||

Db 172 CWNITIKQHTVTTTT 186

## RESULT 5

major prion protein - Callicebus moloch (fragment)  
C/Species: Callicebus moloch  
C/Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
C/Accession: S71048; S53632  
R/Schaezel, H.M.  
submitted to the EMBL Data Library, April 1994  
A/Reference number: S71041  
A/Accession: S71048  
A/Molecule type: DNA  
A/Residues: 1-241 <SCH>  
A/Cross-references: EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:9475586  
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A/Title: Prion protein gene variation among primates.  
A/Reference number: S53614; MUID:95139066; PMID:7837269  
A/Accession: S53632  
A/Status: nucleic acid sequence not shown  
A/Molecule type: DNA  
A/Residues: 1-203, 'R', 205-240 <SCW>  
A/Cross-references: EMBL:U08312  
C/Superfamily: major prion protein  
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 241;  
Best Local Similarity 93.3%; Pred. No. 0.0039;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
|||||  
Db 172 CWNITIKQHTVTTTT 186

## RESULT 6

major prion protein - green monkey  
C/Species: Cercopithecus aethiops (green monkey, grivet)  
C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
C/Accession: S53627; S71043  
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
J. Mol. Biol. 245, 362-374, 1995  
A/Title: Prion protein gene variation among primates.  
A/Reference number: S53614; MUID:95139066; PMID:7837269  
A/Accession: S53627  
A/Status: nucleic acid sequence not shown  
A/Molecule type: DNA  
A/Residues: 1-245 <SCH>  
A/Cross-references: EMBL:U08291  
R/Schaezel, H.M.  
submitted to the EMBL Data Library, April 1994  
A/Reference number: S71041  
A/Accession: S71043  
A/Molecule type: DNA  
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>  
A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341  
C/Superfamily: major prion protein  
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;  
Best Local Similarity 93.3%; Pred. No. 0.004;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
|||||  
Db 171 CWNITIKQHTVTTTT 185

## RESULT 7

S71045

major prion protein - Cercopithecus diana  
 C/Species: Cercopithecus diana  
 C/Date: 14-Feb-1997 #sequence\_revision 14-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S71045; S53628  
 R/Schaezel, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71045  
 A/Molecule type: DNA  
 A/Residues: 1-245 <SCH>  
 A/Cross-references: EMBL:U08292; NID:G474342; PID:AA50081.1; PID:G474343  
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53628  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 8-10, 'L', '12-202', 'R', '204-239' <SCW>  
 A/Cross-references: EMBL:U08292  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 245;  
 Best Local Similarity 93.3%; Pred. No. 0.004; Mismatches 0; Indels 1; Gaps 1;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 171 CWNITIKQHTVTTT 185

## RESULT 8

major prion protein - common marmoset  
 C/Species: Callithrix jacchus (common marmoset)  
 C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S53634; S71047  
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53634  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-252 <SCH>  
 A/Cross-references: EMBL:U08304  
 R/Schaezel, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71047  
 A/Molecule type: DNA  
 A/Residues: 1-209, 'E', '211-252' <SCW>  
 A/Cross-references: EMBL:U08304; NID:G474366; PIDN:AA50092.1; PID:G474367  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;  
 Best Local Similarity 93.3%; Pred. No. 0.004; Mismatches 0; Indels 1; Gaps 1;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 178 CWNITIKQHTVTTT 192

## RESULT 9

major prion protein - brown capuchin  
 C/Species: Cebus apella (brown capuchin, black-capped capuchin)  
 C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S53631; S71044  
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53631  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-252 <SCH>  
 A/Cross-references: EMBL:U08295  
 R/Schaezel, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71044  
 A/Molecule type: DNA  
 A/Residues: 1-209, 'E', '211-252' <SCW>  
 A/Cross-references: EMBL:U08295; NID:G474348; PIDN:AA50084.1; PID:G474349  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 252;  
 Best Local Similarity 93.3%; Pred. No. 0.004; Mismatches 0; Indels 1; Gaps 1;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 178 CWNITIKQHTVTTT 192

## RESULT 10

major prion protein precursor - human  
 N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C  
 C/Species: Homo sapiens (man)  
 C/Date: 25-Oct-1987 #sequence\_revision 12-Apr-1996 #text\_change 11-Aug-2003  
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A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M61929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: 16857
A:Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M61930; NID:g190519; PIDN:AAB59443.1; PID:g190520
B:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:92140671; PMID:1736177
A:Accession: 158135
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGGQPGHGGMGOPHHGGMGOPHGGMGOPHGGMG' <RES>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldhaber, D.; Swergold, G.D.; Willis, P.R.;
Proc.Natl.Acad.Sci.U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A:Status: translated from GB/EMBL/DDBJ
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C:Genetics:
A:Gene: GDB:PMP; CUD; PRIP
A:Cross-references: GDB:P120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20P12
A:Insertions: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeld-Jakob disease (CJD), Gerstmann-Strausler
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F:1-22/Domains: signal sequence #status predicted <SIG>
F:23-23/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-W-Q)
F:231-253/Domains: carboxyl-terminal propeptide #status predicted <CTP>
F:119-214/Disulfide bonds: #status predicted
F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)
Query Match 85.2%; Score 60.5; DB 1; Length 253;
Best Local Similarity 93.3%; Pred. No. 0.0041;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CVNITIKQ-TVTTTT 14
Db 179 CVNITIKQHTVTTTT 193
RESULT 11
137032
major prion protein precursor - gorilla
C:Species: Gorilla gorilla (gorilla)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
R:Carvernakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;
Proc.Natl.Acad.Sci.U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental t
A:Reference number: 15907; MUID:95083661; PMID:7991600
A:Accession: 137032
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
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C:Superfamily: major prion protein
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Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
QY 1 CVNITIKQ-TVTTTT 14

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[illegible]

## RESULT 14

184423

Major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence\_revision 24-May-1996 #text\_change 11-Aug-2003

C:Accession: 184423; S53622; S71054

R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A&gt;Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 116907; MUID:95083661; PMID:7991600

A:Accession: 184423

A&gt;Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 &lt;RES&gt;

A:Cross-references: EMBL:U15163; NID:G595850; PIDN:AA68635.1; PID:G595851

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A&gt;Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A&gt;Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 &lt;SCH&gt;

A:Cross-references: EMBL:U08307

R:Schaetzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71054

A:Molecule type: DNA

A:Residues: 1-253 &lt;SCW&gt;

A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AA650095.1; PID:G474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;

Best Local Similarity 93.3%; Pred. No. 0.0041;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 179 CWNITIKQHTVTTTT 193

## RESULT 15

S53618

Major prion protein - Colobus guereza

C:Species: Colobus guereza

C:Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003

C:Accession: S53618; S71046

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A&gt;Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53618

A&gt;Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 &lt;SCH&gt;

A:Cross-references: EMBL:U08297

R:Schaetzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71046

A:Molecule type: DNA

A:Residues: 1-210, 'E', 212-253 &lt;SCW&gt;

A:Cross-references: EMBL:U08297; NID:G474352; PIDN:AA650086.1; PID:G474353

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 85.2%; Score 60.5; DB 2; Length 253;

Best Local Similarity 93.3%; Pred. No. 0.0041;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14

Db 179 CWNITIKQHTVTTTT 193

Search completed: April 30, 2004, 15:32:09  
Job time: 11.2083 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 31.2083 Seconds

(without alignments)  
124.347 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71  
Sequence: 1 CVNTIKQTVTTT 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1138120 seqs, 27189581 residues

Total number of hits satisfying chosen parameters: 1138120

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

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18: /cgn2\_6/ptodata/1/pubppaa/US60\_PUBCOMB.pep:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	60.5	85.2	22	9	US-09-988-842-8
2	60.5	85.2	23	9	US-09-988-842-10
3	60.5	85.2	23	9	US-09-988-842-11
4	60.5	85.2	33	14	US-10-116-061-36
5	60.5	85.2	117	14	US-10-050-902-348
6	60.5	85.2	117	14	US-10-050-902-348
7	60.5	85.2	117	14	US-10-346-190-89
8	60.5	85.2	124	14	US-10-050-902-324
9	60.5	85.2	124	14	US-10-050-902-324
10	60.5	85.2	124	15	US-10-346-190-93
11	60.5	85.2	162	9	US-09-745-003-10
12	60.5	85.2	163	9	US-09-745-003-11
13	60.5	85.2	163	15	US-10-104-047-2013
14	60.5	85.2	164	9	US-09-745-003-12
15	60.5	85.2	194	14	US-10-029-386-31981

16	60.5	85.2	225	14	US-10-301-488A-25	Sequence 25, Appl
17	60.5	85.2	226	14	US-10-205-194-121	Sequence 121, Appl
18	60.5	85.2	245	14	US-10-304-630-15	Sequence 5, Appl
19	60.5	85.2	245	14	US-10-304-630-15	Sequence 15, Appl
20	60.5	85.2	252	14	US-10-304-630-13	Sequence 13, Appl
21	60.5	85.2	252	14	US-10-304-630-17	Sequence 17, Appl
22	60.5	85.2	253	9	US-09-904-987-3	Sequence 3, Appl
23	60.5	85.2	253	9	US-09-919-172-57	Sequence 57, Appl
24	60.5	85.2	253	9	US-09-943-908-2	Sequence 2, Appl
25	60.5	85.2	253	12	US-10-450-679-6	Sequence 6, Appl
26	60.5	85.2	253	14	US-10-304-630-1	Sequence 1, Appl
27	60.5	85.2	253	14	US-10-304-630-2	Sequence 2, Appl
28	60.5	85.2	253	14	US-10-304-630-3	Sequence 3, Appl
29	60.5	85.2	253	14	US-10-304-630-4	Sequence 4, Appl
30	60.5	85.2	253	14	US-10-304-630-7	Sequence 7, Appl
31	60.5	85.2	253	14	US-10-304-630-8	Sequence 8, Appl
32	60.5	85.2	253	14	US-10-304-630-9	Sequence 9, Appl
33	60.5	85.2	253	14	US-10-304-630-10	Sequence 10, Appl
34	60.5	85.2	253	14	US-10-304-630-11	Sequence 11, Appl
35	60.5	85.2	253	14	US-10-304-630-12	Sequence 12, Appl
36	60.5	85.2	253	14	US-10-304-630-14	Sequence 14, Appl
37	60.5	85.2	253	14	US-10-304-630-16	Sequence 16, Appl
38	60.5	85.2	253	14	US-10-304-630-18	Sequence 18, Appl
39	60.5	85.2	253	14	US-10-304-630-19	Sequence 19, Appl
40	60.5	85.2	253	14	US-10-301-488A-21	Sequence 21, Appl
41	60.5	85.2	253	14	US-10-301-488A-22	Sequence 22, Appl
42	60.5	85.2	253	14	US-10-301-488A-32	Sequence 32, Appl
43	60.5	85.2	253	15	US-10-410-997A-8	Sequence 8, Appl
44	60.5	85.2	253	15	US-10-346-190-79	Sequence 79, Appl
45	60.5	85.2	253	15	US-10-435-602-2	Sequence 2, Appl

#### ALIGNMENTS

RESULT 1  
US-09-988-842-8  
; Sequence 8, Application US/09988842  
; Patent No. US20020143105A1  
GENERAL INFORMATION:  
APPLICANT: Johansson, Jan  
TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION  
FILE REFERENCE: 12125-002001  
CURRENT APPLICATION NUMBER: US/09/988,842  
CURRENT FILING DATE: 2001-11-19  
PRIOR APPLICATION NUMBER: US 60/251,662  
PRIOR FILING DATE: 2000-12-06  
PRIOR APPLICATION NUMBER: US 60/253,695  
PRIOR FILING DATE: 2000-11-20  
NUMBER OF SEQ ID NOS: 26  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 8  
LENGTH: 22  
TYPE: PRT  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetically generated peptide  
US-09-988-842-8  
Query Match 85.2%; Score 60.5; DB 9; Length 22;  
Best Local Similarity 93.3%; Pred.No.0.0025; 0; Indels 1; Gaps 1;  
Matches 14; Conservative 0; Mismatches 0;  
Qy 1 CVNTIKQ-TVTTT 14  
Db 7 CVNTIKQTVTTT 21  
RESULT 2  
US-09-988-842-10  
; Sequence 10, Application US/09988842  
; Patent No. US20020143105A1

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; GENERAL INFORMATION:
; APPLICANT: Johansson, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 10
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-10

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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
         |||||
Db       8 CWNITIKQHTVTTT 22

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RESULT 3
US-09-988-842-11
; Sequence 11, Application US/09988842
; Parent No. US20020143105A1
; GENERAL INFORMATION:
; APPLICANT: Johansson, Jan
; TITLE OF INVENTION: DISCORDANT HELIX STABILIZATION FOR PREVENTION
; FILE REFERENCE: 12125-002001
; CURRENT APPLICATION NUMBER: US/09/988,842
; PRIOR FILING DATE: 2001-11-19
; PRIOR APPLICATION NUMBER: US 60/251,662
; PRIOR FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: US 60/253,695
; PRIOR FILING DATE: 2000-11-20
; NUMBER OF SEQ ID NOS: 26
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 11
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetically generated peptide
US-09-988-842-11

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Query Match      85.2%; Score 60.5; DB 9; Length 23;
Best Local Similarity 93.3%; Pred. No. 0.0026;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
         |||||
Db       8 CWNITIKQHTVTTT 22

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RESULT 4
US-10-116-061-36
; Sequence 36, Application US/10116061
; Publication No. US20030199013A1
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Mee, Roger P.
; TITLE OF INVENTION: Fragments of Prion Proteins

```

```

; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Penite & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentia Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/10/116,061
; FILING DATE: 05-Apr-2002
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,701B
; FILING DATE: 02-JUN-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Fanucci, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENITE
; INFORMATION FOR SEQ ID NO: 36:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 33 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: //label=X
; /note="X may be absent or present independently
; of Y and denotes one or amino acid(s)"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 33
; OTHER INFORMATION: //label=Y
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; SEQUENCE DESCRIPTION: SEQ ID NO: 36:
US-10-116-061-36

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Best Local Similarity 93.3%; Pred. No. 0.0038;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY      1 CWNITIKQ-TVTTTT 14
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Db       7 CWNITIKQHTVTTT 21

```

```

RESULT 5
US-10-050-902-348
; Sequence 348, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Flossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004

```

```

CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
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Query Match      85.2% Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Cy 1 CWNITIKQ-TVTTT 14
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Db 58 CWNITIKQHTVTTT 72
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```

RESULT 6
US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348
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Query Match      85.2% Score 60.5; DB 14; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Cy 1 CWNITIKQ-TVTTT 14
    |||||
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Db 58 CWNITIKQHTVTTT 72
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RESULT 7
US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89
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Query Match      85.2% Score 60.5; DB 15; Length 117;
Best Local Similarity 93.3%; Pred. No. 0.015;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;
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Cy 1 CWNITIKQ-TVTTT 14
    |||||
Db 58 CWNITIKQHTVTTT 72
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RESULT 8
US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
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TYPE: PRT

; ORGANISM: Hamster.sp.  
US-09-745-003-11

Query Match 85.2%; Score 60.5; DB 9; Length 163;  
Best Local Similarity 93.3%; Pred. No. 0.021; Indels 1; Gaps 1;  
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14  
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Db 88 CWNITIKQHTVTTTT 102

RESULT 13  
US-10-104-047-2013

; Sequence 2013, Application US/10104047  
; Publication No. US20030236392A1  
; GENERAL INFORMATION:  
; APPLICANT: HELIX RESEARCH INSTITUTE  
; TITLE OF INVENTION: NO. US20030236392A1 full length cDNA  
; FILE REFERENCE: H1-A0105  
; CURRENT APPLICATION NUMBER: US/10/104,047  
; CURRENT FILING DATE: 2002-03-25  
; PRIOR APPLICATION NUMBER:  
; PRIOR FILING DATE:  
; NUMBER OF SEQ ID NOS: 4096  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 2013  
; LENGTH: 163  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-104-047-2013

Query Match 85.2%; Score 60.5; DB 15; Length 163;  
Best Local Similarity 93.3%; Pred. No. 0.021; Indels 1; Gaps 1;  
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14  
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Db 89 CWNITIKQHTVTTTT 103

RESULT 14  
US-09-745-003-12  
; Sequence 12, Application US/09745003  
; Patent No. US20020042122A1  
; GENERAL INFORMATION:  
; APPLICANT: Bazar, Fernando J  
; TITLE OF INVENTION: Human Proteins, Related Reagents  
; FILE REFERENCE: P:R2  
; CURRENT APPLICATION NUMBER: US/09/745,003  
; CURRENT FILING DATE: 2000-12-20  
; NUMBER OF SEQ ID NOS: 13  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 12  
; LENGTH: 164  
; TYPE: PRT  
; ORGANISM: rodent  
US-09-745-003-12

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Best Local Similarity 93.3%; Pred. No. 0.022; Indels 1; Gaps 1;  
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14  
|||  
Db 88 CWNITIKQHTVTTTT 102

RESULT 15  
US-10-029-386-31981  
; Sequence 31981, Application US/10029386  
; Publication No. US20030194704A1  
; GENERAL INFORMATION:

; APPLICANT: Penn, Sharon G.  
; APPLICANT: Rank, David R.  
; APPLICANT: Hanzel, David K.  
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR  
; TITLE OF INVENTION: EXPRESSION ANALYSIS TWO  
; FILE REFERENCE: ABOMICA-X-2  
; CURRENT APPLICATION NUMBER: US/10/029,386  
; CURRENT FILING DATE: 2001-12-20  
; NUMBER OF SEQ ID NOS: 34288  
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1  
; SEQ ID NO 31981  
; LENGTH: 194  
; TYPE: PRT  
; ORGANISM: Homo sapiens

; FEATURE:  
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; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 7.2  
; OTHER INFORMATION: EXPRESSED IN BONE MARROW, SIGNAL = 2.3  
; OTHER INFORMATION: EXPRESSED IN ADULT LIVER, SIGNAL = 2.3  
; OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 15  
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 3.5  
; OTHER INFORMATION: SWISSPROT HIT: P04156, EVALU 9.00e-59  
US-10-029-386-31981

Query Match 85.2%; Score 60.5; DB 14; Length 194;  
Best Local Similarity 93.3%; Pred. No. 0.026; Indels 1; Gaps 1;  
Matches 14; Conservative 0; Mismatches 0;

QY 1 CWNITIKQ-TVTTTT 14  
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Db 169 CWNITIKQHTVTTTT 183

Search completed: April 30, 2004, 15:35:04  
Job time: 31.2083 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 42 Seconds

(without alignments)

94.183 Million cell updates/sec

Title: US-09-603-832-6

Perfect score: 71

Sequence: 1 CWNITIKQVTTT 14

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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2: Geneseq1990s:\*

3: Geneseq2000s:\*

4: Geneseq2001s:\*

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7: Geneseq2003bs:\*

8: Geneseq2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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4	60.5	85.2	25	5	ABH81631 Pilon mim
5	60.5	85.2	31	7	ADD24220 Human pri
6	60.5	85.2	33	2	AAK38045 Human pri
7	60.5	85.2	117	5	ABG94357 Modified
8	60.5	85.2	117	5	ABG80669 Human pri
9	60.5	85.2	117	7	ADD24196 Modified
10	60.5	85.2	124	5	ABG94340 Mouse mpr
11	60.5	85.2	124	5	ABG80652 Mouse tlu
12	60.5	85.2	124	7	ADD24200 mpr-PC-EK
13	60.5	85.2	142	2	AAW17686 Pilon pro
14	60.5	85.2	142	2	AAW92807 rpr
15	60.5	85.2	163	7	ABH63859 Human pro
16	60.5	85.2	200	5	ABG31907 Human pri
17	60.5	85.2	208	3	AAU99430 Human pri
18	60.5	85.2	208	3	AAU99432 Mouse pri
19	60.5	85.2	208	3	AAU99433 Syrian ha
20	60.5	85.2	208	3	AAU99430 Human pri
21	60.5	85.2	208	4	AAU99432 Mouse pri
22	60.5	85.2	208	5	ABH81631 Pilon mim
23	60.5	85.2	208	5	ABH81631 Pilon mim
24	60.5	85.2	208	5	ABH81631 Pilon mim
25	60.5	85.2	209	5	ABG31905 HCHV type

26	60.5	85.2	211	4	ABH30801 Amino aci
27	60.5	85.2	212	4	ABH30802 Amino aci
28	60.5	85.2	225	6	ABH42793 Rat prion
29	60.5	85.2	226	7	ABH85240 Rat prion
30	60.5	85.2	245	4	ABH72342 Monkey pr
31	60.5	85.2	245	4	ABH72342 Cercopit
32	60.5	85.2	253	2	ABH66715 Human pri
33	60.5	85.2	253	2	ABH66660 Human pri
34	60.5	85.2	253	2	ABH65901 Human pri
35	60.5	85.2	253	2	AAU99430 Human pri
36	60.5	85.2	253	3	AAU99432 Mouse pri
37	60.5	85.2	253	3	AAU99433 Syrian ha
38	60.5	85.2	253	3	ABH81631 Pilon mim
39	60.5	85.2	253	3	ADD24220 Human pri
40	60.5	85.2	253	4	AAK38045 Human pri
41	60.5	85.2	253	4	ABG94357 Modified
42	60.5	85.2	253	4	ABG80669 Human pri
43	60.5	85.2	253	4	ADD24196 Modified
44	60.5	85.2	253	4	ABG94340 Mouse mpr
45	60.5	85.2	253	4	ABG80652 Mouse tlu

#### ALIGNMENTS

RESULT 1	AAU99430 standard; peptide; 22 AA.
ID	AAU99430 standard; peptide; 22 AA.
AC	AAU99430;
DT	07-OCT-2002 (first entry)
XX	Human prion protein (3pre) helical segment.
DE	I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;
KW	cheta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;
KW	Alzheimer's disease; prion disease; scrapie; BSE;
KW	bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;
KW	fibrillation; aggregation; neuroprotective; PDB;
KW	protein databank code; 3pte; prion protein; human; hprp.
XX	Homo sapiens.
OS	MO200241002-A2.
PN	23-MAY-2002.
XX	20-NOV-2001; 2001WO-GB005117.
XX	20-NOV-2000; 2000US-0253695P.
PR	06-DEC-2000; 2000US-0251662P.
XX	(ALPH-) WHITE M P.
PA	(ALPH-) WHITE M P.
PI	White MP, Johansson U;
XX	WPI; 2002-519389/55.
DR	Identifying compounds that stabilize I-helix of discordant helix in
XX	polypeptide, by measuring amount of I-helix in sample containing
PT	discordant helix-containing polypeptide in presence and absence of
PT	compound.
XX	Example 1; Fig 2A; 55pp; English.
PS	The present invention relates to a method of identifying a compound that
CC	stabilizes an I-helical conformation of a discordant helix in a
CC	polypeptide, particularly amyloid beta-peptide (Abeta). The method
CC	comprises providing a test sample comprising a polypeptide that contains
CC	a discordant helix in the form of an I-helix, contacting the test sample
CC	with a test compound and determining the rate of decrease in the amount

CC of I-helix or the amount of I-helix present in the test sample. The  
 CC method is useful for identifying a compound that stabilizes an I-helical  
 CC conformation of a discordant helix in a polypeptide. Such compounds are  
 CC useful for decreasing the rate of formation of theta-strand structures  
 CC between at least two discordant helix-containing polypeptides, and for  
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's  
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform  
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446  
 CC represent >9-residue discordant helical segments from various proteins  
 XX

SQ Sequence 22 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 22;  
 Best Local Similarity 93.3%; Pred. No. 0.0017;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 7 CWNITIKQHTVTTTT 21

## RESULT 2

ID AAU99432 standard; peptide; 23 AA.

AC AAU99432;

DT 07-OCT-2002 (first entry)

DE Mouse prion protein (1ag2) helical segment.

KM I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;  
 KM theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;  
 KM Alzheimer's disease; prion disease; scrapie; BSE;  
 KM bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;  
 KM fibrillation; aggregation; neurotropic; neuroprotective; PDB;  
 KM protein databank code; 1ag2; prion protein; mouse; mbrp.

OS Mus sp.

PN WO200241002-A2.

PD 23-MAY-2002.

PF 20-NOV-2001; 2001WO-GB005117.

PR 20-NOV-2000; 2000US-0253695P.

PR 06-DEC-2000; 2000US-0251662P.

PA (ALPH-) ALPHABETA AB.

PA (WHIT/) WHITE M P.

PI White MP, Johansson J;

PT WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in  
 PT polypeptide, by measuring amount of I-helix in sample containing  
 PT discordant helix-containing polypeptide in presence and absence of  
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

XX The present invention relates to a method of identifying a compound that  
 CC stabilizes an I-helical conformation of a discordant helix in a  
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method  
 CC comprises providing a test sample comprising a polypeptide that contains  
 CC a discordant helix in the form of an I-helix, contacting the test sample  
 CC with a test compound and determining the rate of decrease in the amount  
 CC of I-helix or the amount of I-helix present in the test sample. The  
 CC method is useful for identifying a compound that stabilizes an I-helical  
 CC conformation of a discordant helix in a polypeptide. Such compounds are  
 CC useful for decreasing the rate of formation of theta-strand structures

CC between at least two discordant helix-containing polypeptides, and for  
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's  
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform  
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446  
 CC represent >9-residue discordant helical segments from various proteins  
 XX

SQ Sequence 23 AA;

Query Match 85.2%; Score 60.5; DB 5; Length 23;  
 Best Local Similarity 93.3%; Pred. No. 0.0017;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 8 CWNITIKQHTVTTTT 22

## RESULT 3

ID AAU99433 standard; peptide; 23 AA.

AC AAU99433;

DT 07-OCT-2002 (first entry)

DE Syrian hamster prion protein (1b10) helical segment.

KM I-helical conformation; discordant helix; amyloid beta-peptide; I-helix;  
 KM theta-strand structure; amyloidogenic disorder; Abeta; amyloidosis;  
 KM Alzheimer's disease; prion disease; scrapie; BSE;  
 KM bovine spongiform encephalopathy; Creutzfeldt-Jacob disease; CJD;  
 KM fibrillation; aggregation; neurotropic; neuroprotective; PDB;  
 KM protein databank code; 1b10; prion protein; syrian hamster; sprp.

OS Mesocricetus auratus.

PN WO200241002-A2.

PD 23-MAY-2002.

PF 20-NOV-2001; 2001WO-GB005117.

PR 20-NOV-2000; 2000US-0253695P.

PR 06-DEC-2000; 2000US-0251662P.

PA (ALPH-) ALPHABETA AB.

PA (WHIT/) WHITE M P.

PI White MP, Johansson J;

PT WPI; 2002-519389/55.

PT Identifying compounds that stabilize I-helix of discordant helix in  
 PT polypeptide, by measuring amount of I-helix in sample containing  
 PT discordant helix-containing polypeptide in presence and absence of  
 PT compound.

PS Example 1; Fig 2A; 55pp; English.

XX The present invention relates to a method of identifying a compound that  
 CC stabilizes an I-helical conformation of a discordant helix in a  
 CC polypeptide, particularly amyloid beta-peptide (Abeta). The method  
 CC comprises providing a test sample comprising a polypeptide that contains  
 CC a discordant helix in the form of an I-helix, contacting the test sample  
 CC with a test compound and determining the rate of decrease in the amount  
 CC of I-helix or the amount of I-helix present in the test sample. The  
 CC method is useful for identifying a compound that stabilizes an I-helical  
 CC conformation of a discordant helix in a polypeptide. Such compounds are  
 CC useful for decreasing the rate of formation of theta-strand structures  
 CC between at least two discordant helix-containing polypeptides, and for  
 CC treating amyloidogenic disorders such as amyloidosis in Alzheimer's  
 CC disease, and prion diseases (e.g. scrapie, bovine spongiform  
 CC encephalopathy (BSE), Creutzfeldt-Jacob disease (CJD)). AAU99426-AAU99446

CC represent 39-residue discordant helical segments from various proteins  
XX  
SQ Sequence 23 AA;  
Query Match 85.2%; Score 60.5; DB 5; Length 23;  
Best Local Similarity 93.3%; Pred. No. 0.0017;  
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1.

QY 1 CWNITTKO-TVTTTT 14  
DB 8 CWNITTKOHTVTTTT 22

RESULT 4  
ABB81631  
ID ABB81631 standard; peptide; 25 AA.  
XX  
XX ABB81631;  
AC  
AD  
DT 25-SEP-2002 (first entry)  
XX  
XX Prion mimetic peptide SEQ ID NO:3.  
DE  
XX Prion mimetic peptide; degradation; detection; TSE; infection;  
KW Prion mimetic peptide; degradation; detection; TSE; infection;  
KW transmissible spongiform encephalopathy; prion protein; sterilisation;  
KW immunisation; Creutzfeldt-Jacob disease; kuru; fatal familial insomnia;  
KW Gerstmann-Strausler-Scheinker syndrome; chronic wasting disease;  
KW bovine spongiform encephalopathy; feline spongiform encephalopathy;  
KW scrapie; transmissible mink encephalopathy.  
KM  
OS Synthetic.  
OS  
XX  
XX W0200253723-A2.  
PN  
XX  
XX 11-JUL-2002.  
PD  
XX  
XX 08-JAN-2002; 2002MO-GB000052.  
PF  
XX  
XX 08-JAN-2001; 2001GB-00000420.  
PR 26-FEB-2001; 2001GB-00004696.  
XX  
XX (MICR-) MICROBIOLOGICAL RES AUTHORITY.  
PA  
P1 Raven NDH;  
XX  
XX WPI; 2002-557743/59.  
DR  
PT Inactivating transmissible spongiform encephalopathy (TSE) agent such as  
PT Creutzfeldt-Jacob disease, scrapie, kuru or Gerstmann-Strausler-  
PT Scheinker syndrome involves exposing agent to thermostable proteolytic  
PT enzyme.  
XX  
PS Example; Page 19; 41pp; English.  
XX

CC The present invention describes a method (M1) for inactivating a  
transmissible spongiform encephalopathy (TSE) agent comprising exposing  
the TSE agent to a thermostable proteolytic enzyme. Also described: (1) a  
composition (I) for inactivating a TSE agent, comprising a thermostable  
proteolytic enzyme; (2) an antibody (II) specific for a prion dimer which  
does not bind to a prion monomer; and (3) a purified prion dimer. (M1) is  
useful for inactivating a TSE agent such as a prion. A TSE agent is  
Creutzfeldt-Jacob disease or its variant, kuru, fatal familial insomnia,  
Gerstmann-Strausler-Scheinker syndrome, bovine spongiform  
encephalopathy, scrapie, feline spongiform encephalopathy, chronic  
wasting disease or transmissible mink encephalopathy. (I) is useful for  
sterilising material contaminated with the TSE agent. A prion dimer is  
useful for examining a sample infected with or suspected to be infected  
by a prion protein, and for detecting prion infectivity, by detecting a  
prion dimer in the sample. A prion dimer is useful for producing (II), by  
immunising an animal with a prion dimer, obtaining its extract which  
contains (II), and isolating (II) from the extract. The method comprises  
obtaining an antibody preparation containing antibodies which bind a  
prion dimer, and removing (II) from the preparation. (M1) and (I) are

useful for inactivating TSE agents in potentially contaminated clinical waste and culled animal material. (M1) is useful for sterilising larger surface areas of apparatus, operating tables or even walls of rooms. The present sequence represents a prion mimetic peptide which is used in an example from the present invention in the preparation of antibodies including dimer preferential antibodies

Sequence 25 Aa;

Query Match	85.2%;	Score 60.5;	DB 5;	Length 25;
Best Local Similarity	93.3%;	Pred. No. 0.0019;		
Matches 14;	Conservative 0;	Mismatches 0;	Indels 1;	Gaps 1;
OY	1 CWNITIKO-TVTTTT 14       1 CWNITIKQHTVTITT 15			
Db				
RESULT 5				
ADD24220				
ID	ADD24220 standard; peptide; 31 Aa.			
XX				
AC	ADD24220;			
XX				
DT	15-JAN-2004 (first entry)			
XX				
DE	Human prion protein PrP peptide #6.			
KW	vaccine composition; virus-like particle; core particle;			
KW	first attachment site; antigen; antigenic determinant; prion protein;			
KW	PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;			
KW	prion disease; Bovine Spongiform Encephalopathy; BSE;			
KW	Creutzfeldt-Jakob Disease; prion.			
OS	prion.			
XX				
FN	WO2003059386-A2.			
XX				
PD	24-JUL-2003.			
XX				
PF	17-JAN-2003; 2003MO-EP000460.			
PR	18-JAN-2002; 2002US-00050902.			
PR	21-JAN-2002; 2002MO-IB000166.			
PR	08-JUL-2002; 2002US-0393725P.			
PR	18-JUL-2002; 2002US-0396590P.			
PA	(CYTO-) CYTOS BIOTECHNOLOGY AG.			
PI	Bachmann M, Maurer P, Pelliccioli E, Renner WA;			
DR	WFI; 2003-598483/56.			
PT	A vaccine composition for preventing or treating prion diseases (e.g. Creutzfeldt-Jakob disease) comprises a virus-like particle (e.g. RNA-phase) and at least one prion protein or peptide bound to the virus-like particle.			
PS	Disclosure; Page 81; 246pp; English.			
XX	This invention relates to a novel vaccine composition comprising a virus-like or a core particle with at least one first attachment site and at least one antigen or antigenic determinant that is a prion protein (PrP) or its dimer, or a PrP peptide, the antigen or antigenic determinant being bound to the virus-like or core particle. The vaccine of the invention may have neuroprotective or antiinflammatory activity. The composition is useful as a medicament or in manufacturing a medicament for the treatment or prevention of prion diseases. The prion diseases may include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob disease. The present sequence is that of a peptide fragment of a prion protein which may be used for the production of the vaccine of the invention.			

SQ Sequence 31 AA;  
 Query Match 85.2%; Score 60.5; DB 7; Length 31;  
 Best Local Similarity 93.3%; Pred. No. 0.0024;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Oy 1 CWNITIKQ-TVTTTT 14  
 |||||  
 Db 6 CWNITIKQHTVTTTT 20,  
 |||||  
 RESULT 6  
 AAR38045  
 ID AAR38045 standard; Proteins, 33 AA.  
 XX  
 AC AAR38045;  
 XX  
 DT 25-MAR-2003 (revised)  
 DT 14-OCT-1993 (first entry)  
 XX  
 DE Human prion protein region F #1.  
 XX  
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;  
 KM F5a; F5b; subfragment; antibody; treatment; spongiform encephalopathy;  
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;  
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;  
 KM resistance.  
 XX  
 OS Synthetic.  
 XX  
 Key Location/Qualifiers  
 FH Misc-difference 1 /note= "One or more residues or may be absent"  
 FT Misc-difference 2 /note= "May be absent"  
 FT Misc-difference 3 /note= "May be absent"  
 FT Misc-difference 4 /note= "May be absent"  
 FT Misc-difference 5 /note= "May be absent"  
 FT Misc-difference 29 /note= "May be absent"  
 FT Misc-difference 30 /note= "May be absent"  
 FT Misc-difference 31 /note= "May be absent"  
 FT Misc-difference 32 /note= "May be absent"  
 FT Misc-difference 33 /note= "May be absent"  
 FT Misc-difference /note= "One or more residue or may be absent"  
 PN WO931155-A1.  
 PD 10-JUN-1993.  
 XX  
 PF 03-DEC-1992; 92WO-GB002246.  
 XX  
 PR 03-DEC-1991; 91GB-00025747.  
 PR 10-JUL-1992; 92GB-00014663.  
 XX  
 PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.  
 PI Fishleigh RV, Robson B, Mee RP;  
 XX  
 DR WPI; 1993-196994/24.  
 XX  
 PT New polypeptide(s) contg. antigenic site of prion, protein - useful for  
 PT treatment and diagnosis of mammalian encephalopathies e.g. Creutzfeldt-  
 PT Jakob disease and Kuru.  
 XX  
 PS Claim 28; Page 74; 82pp; English.  
 XX

CC The sequences given in AAR38041-48 represent polypeptides which are  
 CC derived from an antigenic site, region F, of a prion protein. Prion  
 CC proteins comprise six regions of interest (A-F), and two related frame  
 CC shift peptide sequences caused by a repeating section in region E having  
 CC a nucleic acid coding sequence frame shift mutation of +1 (F5a) or -1  
 CC (F5b). These peptides (see also AAR38041-48) and antibodies raised  
 CC against these may be used to treat or prevent spongiform encephalopathy  
 CC in humans, sheep or cattle. They can be used to block cellular binding  
 CC and aggregation of prion proteins and to stimulate the mammalian immune  
 CC system. These peptides may be used to distinguish between the normal form  
 CC of prion protein (PrPc) and the scrapie-associated form (PrPsc). These  
 CC peptides may include rare or synthetic amino acids or a ratio-inverso  
 CC peptide modification to improve resistance to enzymatic degradation.  
 CC (Updated on 25-MAR-2003 to correct PN field.)  
 XX  
 SQ Sequence 33 AA;  
 Query Match 85.2%; Score 60.5; DB 2; Length 33;  
 Best Local Similarity 93.3%; Pred. No. 0.0026;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Oy 1 CWNITIKQ-TVTTTT 14  
 |||||  
 Db 7 CWNITIKQHTVTTTT 21  
 |||||  
 RESULT 7  
 ABG94357  
 ID ABG94357 standard; protein, 117 AA.  
 XX  
 AC ABG94357;  
 XX  
 DT 10-DEC-2002 (first entry)  
 XX  
 DE Modified human prion protein fragment.  
 XX  
 KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;  
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;  
 KM vaccine; infectious disease.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200256905-A2.  
 PD 25-JUL-2002.  
 XX  
 PF 21-JAN-2002; 2002WO-1B000166.  
 XX  
 PR 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288549P.  
 PR 05-OCT-2001; 2001US-0326998P.  
 PR 07-NOV-2001; 2001US-0331045P.  
 XX  
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 XX  
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;  
 PI Flossek C;  
 XX  
 DR WPI; 2002-627351/67.  
 XX  
 PT Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.  
 XX  
 PS Disclosure; Page 441; 441pp; English.  
 XX  
 CC This invention relates to a novel ordered and repetitive antigen array  
 CC used in the production of vaccines for infectious diseases. The invention  
 CC also discloses a composition comprising a non-natural molecular scaffold  
 CC comprising a core particle selected from a core particle of a non-natural  
 CC origin and a core particle of natural origin and an organiser comprising  
 CC at least one first attachment site, where the organiser is connected to  
 CC the core particle by at least one covalent bond. Also disclosed is an  
 CC antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide  
 CC (Abeta1-42) or its fragment and where the second attachment site is  
 CC selected from an attachment site not naturally occurring with the antigen  
 CC or antigenic determinant and an attachment site naturally occurring with  
 CC the antigen or antigenic determinant, where the second attachment site is  
 CC capable of association through at least one non-peptide bond to the first  
 CC attachment site and where the antigen or antigenic determinant and the  
 CC scaffold interact through the association to form an ordered and  
 CC repetitive antigen array. The invention also comprises a coat protein  
 CC capable of forming a capsid which comprises mutant beta coat proteins  
 CC having an amino acid sequence selected from five amino acid sequences  
 CC fully defined in the specification. The compounds of the invention may  
 CC have antimicrobial, antiallergic, immunomodulatory, cyostatic, or  
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in  
 CC immunisation and as a vaccine. The present sequence represents a protein  
 CC sequence used to create the compositions of the invention  
 SQ Sequence 117 AA;

Query March 85.2%; Score 60.5; DB 5; Length 117;  
 Best Local Similarity 93.3%; Pred. No. 0.0099;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 58 CWNITIKQHTVTTT 72

RESULT 8  
 ABG80669  
 ID ABG80669 standard; protein; 117 AA.

AC ABG80669;

DT 29-NOV-2002 (first entry)

XX Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;  
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; muten;  
 KW graft versus host disease; IgE-mediated allergic reaction; anaphylaxis;  
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;  
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;  
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;  
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;  
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;  
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;  
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;  
 KW enterokinase; cysteine-containing linker.

OS Homo sapiens.  
 OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288548P.  
 PR 05-OCT-2001; 2001US-0326986P.  
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (NOVS) NOVARTIS PHARMA AG.

PA (MAUR) MAURER P.

PA (LECH) LECHNER F.

PA (ORTW) ORTMANN R.

PA (LUEO) LUEOEND R.

PA (STAU) STAUFENBIEL M.

PA (FREY) FREY P.

XX

PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;  
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosser C;  
 DR WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural  
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a  
 CC core particle of a non-natural origin; and (2) a core particle of natural  
 CC origin; and (ii) an organiser comprising at least one first attachment  
 CC site, where the organiser is connected to the core particle by at least  
 CC one covalent bond; (b) an antigen or antigenic determinant with at least  
 CC one second attachment site, where the antigen or antigenic determinant is  
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second  
 CC attachment site is selected from: (i) an attachment site not naturally  
 CC occurring with the antigen or antigenic determinant; and (ii) an  
 CC attachment site naturally occurring with the antigen or antigenic  
 CC determinant, where the second attachment site is capable of association  
 CC through at least one non-peptide bond to the first attachment site; and  
 CC where the antigen or antigenic determinant and the scaffold interact  
 CC through the association to form an ordered and repetitive antigen array.  
 CC Also included is a process for producing a non-naturally occurring  
 CC ordered and repetitive antigen array. The composition is used in  
 CC immunisation and as a vaccine for diseases such as influenza, graft  
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult  
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,  
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,  
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia  
 CC gravis, immunoproliferative disease lymphadenopathy,  
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,  
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,  
 CC osteoporosis and infectious diseases. The present sequence is a modified to  
 CC antigen for use in the array of the invention. The antigen is modified to  
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-  
 CC containing N- or C-terminal linker peptide which serves as the attachment  
 CC point to a virus like particle or bacterial protein (the scaffold  
 CC protein)

XX Sequence 117 AA;

Query March 85.2%; Score 60.5; DB 5; Length 117;  
 Best Local Similarity 93.3%; Pred. No. 0.0099;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 58 CWNITIKQHTVTTT 72

RESULT 9  
 ADD24196

ID ADD24196 standard; protein; 117 AA.

AC ADD24196;

DT 15-JUN-2004 (first entry)

DE Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;  
 KW first attachment site; antigen; antigenic determinant; prion protein;  
 KW PpP; PpP peptide; vaccine; neuroprotective; antiinflammatory;  
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;  
 KW Creutzfeldt-Jakob Disease; prion; mutant; muten.

OS Synthetic.

OS prion.

PN WO2003059386-A2.

XX 24-JUL-2003.  
 PD 17-JAN-2003; 2003WO-EP000460.  
 XX 18-JAN-2002; 2002US-00050902.  
 PR 21-JAN-2002; 2002WO-1B000166.  
 PR 08-JUL-2002; 2002US-0393725P.  
 PR 18-JUL-2002; 2002US-0396590P.  
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;  
 PI WPI; 2003-598483/56.  
 DR A vaccine composition for preventing or treating prion diseases (e.g.  
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-  
 PT phase) and at least one prion protein or peptide bound to the virus-like  
 PT particle.  
 XX Disclosure; SEQ ID NO 89; 246pp; English.  
 PS This invention relates to a novel vaccine composition comprising a virus-  
 CC like or a core particle with at least one first attachment site and at  
 CC least one antigen or antigenic determinant that is a prion protein (PrP)  
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant  
 CC being bound to the virus-like or core particle. The vaccine of the  
 CC invention may have neuroprotective or antiinflammatory activity. The  
 CC composition is useful as a medicament or in manufacturing a medicament  
 CC for the treatment or prevention of prion diseases. The prion diseases may  
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob  
 CC disease. The present sequence is the amino acid sequence of a modified  
 CC human prion protein (PrP) which may be used during the creation of the  
 CC vaccine composition of the invention.  
 XX Sequence 117 AA;  
 SQ

Query Match 85.2%; Score 60.5; DB 7; Length 117;  
 Best Local Similarity 93.3%; Pred. No. 0.0099;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 58 CWNITIKQHTVTTTT 72

RESULT 10  
 ABG94340  
 ID ABG94340 standard; protein; 124 AA.  
 AC ABG94340;  
 XX  
 DT 10-DEC-2002 (first entry)  
 XX  
 DE Mouse mPrp protein.  
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;  
 KM cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;  
 KW vaccine; infectious disease.  
 XX Mus sp.  
 OS WO200256905-A2.  
 PN 25-JUL-2002.  
 PD 21-JAN-2002; 2002WO-1B000166.  
 PF 19-JAN-2001; 2001US-0262379P.  
 PR 04-MAY-2001; 2001US-0288549P.  
 PR 05-OCT-2001; 2001US-0326998P.  
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.  
 PA Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Seibel P,  
 PI Piossek C;  
 PI WPI; 2002-627351/67.  
 DR Molecular antigen array used in the production of vaccines for infectious  
 PT diseases.  
 PT Disclosure; Page 438; 441pp; English.  
 PS This invention relates to a novel ordered and repetitive antigen array  
 CC used in the production of vaccines for infectious diseases. The invention  
 CC also discloses a composition comprising a non-natural molecular scaffold  
 CC comprising a core particle selected from a core particle of a non-natural  
 CC origin and a core particle of natural origin and an organiser comprising  
 CC at least one first attachment site, where the organiser is connected to  
 CC the core particle by at least one covalent bond. Also disclosed is an  
 CC antigen or antigenic determinant with at least one second attachment  
 CC site, where the antigen or antigenic determinant is amyloid beta peptide  
 CC (Abeta1-42) or its fragment and where the second attachment site is  
 CC selected from an attachment site not naturally occurring with the antigen  
 CC or antigenic determinant and an attachment site naturally occurring with  
 CC the antigen or antigenic determinant, where the second attachment site is  
 CC capable of association through at least one non-peptide bond to the first  
 CC attachment site and where the antigen or antigenic determinant and the  
 CC scaffold interact through the association to form an ordered and  
 CC repetitive antigen array. The invention also comprises a coat protein  
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins  
 CC having an amino acid sequence selected from five amino acid sequences  
 CC fully defined in the specification. The compounds of the invention may  
 CC have antimicrobial, antiallergic, immunomodulatory, cytoskeletal,  
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in  
 CC immunisation and as a vaccine. The present sequence represents a protein  
 CC sequence used to create the compositions of the invention  
 XX Sequence 124 AA;  
 SQ

Query Match 85.2%; Score 60.5; DB 5; Length 124;  
 Best Local Similarity 93.3%; Pred. No. 0.01;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

QY 1 CWNITIKQ-TVTTTT 14  
 DB 59 CWNITIKQHTVTTTT 73

RESULT 11  
 ABG80652  
 ID ABG80652 standard; protein; 124 AA.  
 AC ABG80652;  
 XX  
 DT 23-NOV-2002 (first entry)  
 XX  
 DE Mouse truncated prion protein with C terminal cysteine containing linker.  
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;  
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutagen;  
 KM graft versus host disease; IGF-mediated allergic reaction; anapylaxis;  
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;  
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;  
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;  
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;  
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;  
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;  
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;  
 KM enterokinase; cysteine-containing linker.  
 XX Mus sp.  
 OS Synthetic.



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XX  MO200256907-A2.
PN
XX
XX  25-JUL-2002.
XX
XX  21-JAN-2002; 2002WO-IB000168.
XX
XX  19-JAN-2001; 2001US-0262379P.
XX  04-MAY-2001; 2001US-0288549P.
XX  05-OCT-2001; 2001US-0326998P.
XX  07-NOV-2001; 2001US-0331045P.
XX
XX  (CYTO-) CYTOS BIOTECHNOLOGY AG.
PA  (NOVS) NOVARTIS PHARMA AG.
PA  (MAUR) MAURER P.
PA  (LECH) LECHNER F.
PA  (ORTM) ORTMANN R.
PA  (LUEO) LUEOEND R.
PA  (STAU) STAUFENBIEL M.
PA  (FREY) FREY P.
XX
XX  Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P,
PI  Renner WA, Bachmann M, Tissot A, Sebbel P, Plossek C,
XX  WPI; 2002-636514/68.
XX
XX  Molecular antigen array used in the production of vaccines for infectious
XX  diseases.
XX
XX  Example 7; Page 415; 418pp; English.
XX
XX  The invention relates to a composition comprising: (a) a non-natural
XX  molecular scaffold comprising: (1) a core particle selected from: (1) a
XX  core particle of a non-natural origin; and (2) a core particle of natural
XX  origin; and (11) an organiser comprising at least one first attachment
XX  site, where the organiser is connected to the core particle by at least
XX  one covalent bond; (b) an antigen or antigenic determinant with at least
XX  one second attachment site, where the antigen or antigenic determinant is
XX  amyloid beta peptide (abeta 1-42) or its fragment, and where the second
XX  attachment site is selected from: (1) an attachment site not naturally
XX  occurring with the antigen or antigenic determinant; and (11) an
XX  attachment site naturally occurring with the antigen or antigenic
XX  determinant, where the second attachment site is capable of association
XX  through at least one non-peptide bond to the first attachment site; and
XX  where the antigen or antigenic determinant and the scaffold interact
XX  through the association to form an ordered and repetitive antigen array.
XX  Also included is a process for producing a non-naturally occurring
XX  ordered and repetitive antigen array. The composition is used in
XX  immunisation and as a vaccine for diseases such as influenza, graft
XX  versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
XX  respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
XX  acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
XX  systemic lupus erythematosus, inflammatory immune diseases, myasthenia
XX  gravis, immunoproliferative disease lymphadenopathy,
XX  angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
XX  rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
XX  osteoporosis and infectious diseases. The present sequence is a modified
XX  antigen for use in the array of the invention. The antigen is modified to
XX  possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
XX  containing N- or C-terminal linker peptide which serves as the attachment
XX  point to a virus like particle or bacterial protein (the scaffold
XX  protein)
XX
XX  Sequence 124 AA;
SQ

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Query Match      85.2%; Score 60.5; DB 5; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.01;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

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QY  1 CWNITIKQ-TVTTTT 14
    |||||
DB  59 CWNITIKQHTVTTTT 73

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RESULT 12
ADD24200
ID  ADD24200 standard; protein; 124 AA.
XX
XX  ADD24200;
AC
XX  15-JAN-2004 (first entry)
DT
XX
XX  mPrPt-EK-Fc* cleaved protein sequence.
DE
XX
XX  Vaccine composition; virus-like particle; core particle;
XX  first attachment site; antigen; antigenic determinant; prion protein;
XX  PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
XX  prion disease; Bovine Spongiform Encephalopathy; BSE;
XX  Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.
OS  Unidentified.
OS  prion.
XX
XX  WO2003059386-A2.
XX
XX  24-JUL-2003.
XX
XX  17-JAN-2003; 2003WO-EP000460.
XX
XX  19-JAN-2002; 2002US-00050902.
XX  21-JAN-2002; 2002WO-IB000166.
XX  08-JUL-2002; 2002US-0393725P.
XX  18-JUL-2002; 2002US-0396590P.
XX
XX  (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX  Bachmann M, Maurer P, Pelliccioli E, Renner WA;
PI  WPI; 2003-598483/56.
XX
XX  A vaccine composition for preventing or treating prion diseases (e.g.
XX  Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX  phage) and at least one prion protein or peptide bound to the virus-like
XX  particle.
XX
XX  Example 13; SEQ ID NO 93; 246pp; English.
XX
XX  This invention relates to a novel vaccine composition comprising a virus-
XX  like or a core particle with at least one first attachment site and at
XX  least one antigen or antigenic determinant that is a prion protein (PrP)
XX  or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX  being bound to the virus-like or core particle. The vaccine of the
XX  invention may have neuroprotective or anti-inflammatory activity. The
XX  composition is useful as a medicament or in manufacturing a medicament
XX  for the treatment or prevention of prion diseases. The prion diseases may
XX  include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX  Disease. The present sequence is the amino acid sequence of the cleaved
XX  protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
XX  which was used during the exemplification of the invention.
XX
XX  Sequence 124 AA;
SQ

```

```

Query Match      85.2%; Score 60.5; DB 7; Length 124;
Best Local Similarity 93.3%; Pred. No. 0.01;
Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

```

```

QY  1 CWNITIKQ-TVTTTT 14
    |||||
DB  59 CWNITIKQHTVTTTT 73

```

```

RESULT 13
AAW17686
ID  AAW17686 standard; peptide; 142 AA.
XX
XX  AAW17686;
AC

```

XX 14-JAN-1998 (first entry)  
 DT XX  
 XX  
 DE Prion protein peptide Hu 90-231.  
 XX  
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;  
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;  
 KM Creutzfeldt-Jakob disease; Kuru; GSS; FFI; fatal familial insomnia;  
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO9716728-A1.  
 XX  
 PD 09-MAY-1997.  
 XX  
 PF 28-OCT-1996; 96WO-US017462.  
 XX  
 PR 02-NOV-1995; 95US-00556823.  
 XX  
 PA (REGC ) UNIV CALIFORNIA.  
 XX  
 PI Prusiner SB, Kaneko K, Cohen FE;  
 XX  
 DR WPI; 1997-272248/24.  
 XX  
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in  
 PT assays for screening compounds able to inhibit or decrease the binding of  
 PT PrP peptide(s) to cellular prion proteins or peptide(s).  
 XX  
 PS Claim 11; Page 7-38; 50pp; English.  
 XX  
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an  
 CC ability to induce a conformational change in cellular prion protein (PrP-  
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c  
 CC to a PrP peptide, are used for screening for drugs that may be useful in  
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform  
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-  
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)  
 XX  
 SQ Sequence 142 AA;  
 Query Match 85.2%; Score 60.5; DB 2; Length 142;  
 Best Local Similarity 93.3%; Pred. No. 0.012;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Oy 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 90 CWNITIKQHTVTTT 104  
 RESULT 14  
 AAM92807  
 ID AAM92807 standard; protein; 142 AA.  
 XX  
 AC AAM92807;  
 XX  
 DT 07-MAY-1999 (first entry)  
 XX  
 DE Mouse rPrP protein fragment.  
 XX  
 KM Murine; prion protein; PPMF; prion protein modulator factor; PrP; PrP(c);  
 KM PrP(Sc); scrapie; isoform; pathogenic; inhibitor; screening;  
 KM disease resistance; transgenic.  
 XX  
 OS Mus sp.  
 XX  
 PN WO9855132-A1.  
 XX  
 PD 10-DEC-1998.  
 XX  
 PF 18-MAY-1998; 98WO-US010104.  
 XX

PR 02-JUN-1997; 97US-00868162.  
 PR 12-MAY-1998; 98US-00076606.  
 XX  
 PA (REGC ) UNIV CALIFORNIA.  
 XX  
 PI Prusiner SB, Cohen FE, James TL, Kaneko K;  
 XX  
 DR WPI; 1999-080819/07.  
 XX  
 PT Novel Prion Protein Modulation Factor(s) - useful to increase speed and  
 PT sensitivity of assays to detect pathogenic prion proteins.  
 XX  
 PS Disclosure; Fig 6A-B; 93pp; English.  
 XX  
 CC This invention describes a composition of Prion Protein Modulation Factor  
 CC (PPMF) which binds the prion protein PrP(c) and facilitates a  
 CC conformational change from PrP(c) to the scrapie isoform of the PrP  
 CC protein, PrP(Sc). PPMF is involved in complex formation as the rate  
 CC limiting step. The protein can therefore be used in assays to "speed  
 CC up" formation of the complex and conversion of prion proteins to the  
 CC pathogenic stage and thus can be used to rapidly detect the presence of  
 CC pathogenic prion proteins in a sample. The compositions can be used to  
 CC screen for compounds that inhibit PrP(Sc) formation. The gene can also be  
 CC used to generate transgenic animals which are resistant to prion diseases  
 XX  
 SQ Sequence 142 AA;  
 Query Match 85.2%; Score 60.5; DB 2; Length 142;  
 Best Local Similarity 93.3%; Pred. No. 0.012;  
 Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;  
 Oy 1 CWNITIKQ-TVTTT 14  
 |||||  
 Db 90 CWNITIKQHTVTTT 104  
 RESULT 15  
 ADB63859  
 ID ADB63859 standard; protein; 163 AA.  
 XX  
 AC ADB63859;  
 XX  
 DT 04-DEC-2003 (first entry)  
 XX  
 DE Human protein encoded by clone ASPR02005570.  
 XX  
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;  
 KM cell regeneration; membrane protein; signal transduction-related protein;  
 KM transcription-related protein; osteoporosis; neurological disease;  
 KM cancer; tumour.  
 XX  
 OS Homo sapiens.  
 XX  
 PN EP1308459-A2.  
 XX  
 PD 07-MAY-2003.  
 XX  
 PF 26-MAR-2002; 2002EP-00007401.  
 XX  
 PR 05-NOV-2001; 2001JP-00379298.  
 XX  
 PR 25-JAN-2002; 2002US-00350978.  
 XX  
 PA (HELI-) HELIX RES INST.  
 XX  
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.  
 XX  
 PI Isogai T, Sugiyama T, Otsuki T, Makamatsu A, Sato H, Ishii S;  
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;  
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;  
 XX  
 DR WPI; 2003-450961/43.  
 DR N-PSDB; ADB61889.  
 XX  
 PT New polynucleotides and polypeptides, useful for developing a diagnostic

PT marker or medicines for regulation of their expression and activity, or  
PT as targets of gene therapy.

PS Claim 1; Page: 222pp; English.

XX  
CC The invention discloses a polynucleotide comprising a sequence selected  
CC from 1970 fully defined nucleotide sequences which encode novel  
CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide  
CC or its partial peptide, an antibody binding to the polypeptide or peptide  
CC of the polynucleotide, immunologically assaying the polypeptide or  
CC peptide of the polynucleotide by contacting the polypeptide or peptide  
CC with the antibody of the encoded protein, and observing the binding  
CC between the two, a transformant carrying the polynucleotide in an  
CC expressible manner and an antisense polynucleotide. The oligonucleotide  
CC is useful as a primer for synthesising the polynucleotide, or as a probe  
CC for detecting the polynucleotide. The polynucleotides and encoded  
CC proteins are useful as pharmaceutical agents and many disease-related  
CC genes may be included in them, for developing a diagnostic marker or  
CC medicines for regulation of their expression and activity, or as targets  
CC of gene therapy. The genes are involved in tissue and/or cell  
CC regeneration. Membrane proteins, signal transduction-related proteins,  
CC transcription-related proteins, disease-related proteins and genes  
CC encoding them can be used as indicators for diseases (e.g. osteoporosis,  
CC neurological diseases, cancer, tumours. The cDNA may be used to regulate  
CC the activity or expression of the encoded protein to treat diseases. The  
CC sequence presented is a protein of the invention. Note: Some of the  
CC sequence data for this patent is not represented in the printed  
CC specification, but is based on sequence information supplied by the  
CC European Patent Office.

XX  
SQ Sequence 163 AA;

Query Match 85.2%; Score 60.5; DB 7; Length 163;  
Best Local Similarity 93.3%; Pred. No. 0.014;

Matches 14; Conservative 0; Mismatches 0; Indels 1; Gaps 1;

OY 1 CWNITIKO-TVTTT 14

Db 89 CWNITIKOHVTTT 103

Search completed: April 30, 2004, 15:28:53  
Job time : 42 secs

GenCore version 5.1.6  
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## OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 29.4583 Seconds  
(without alignments)  
149.949 Million cell updates/sec

Title: US-09-603-832-5  
Perfect score: 86  
Sequence: 1 NDMEDRYREMYR 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

## Database :

SPTREMBL\_25:\*

- 1: sp\_archaea:\*
- 2: sp\_bacteria:\*
- 3: sp\_fungi:\*
- 4: sp\_human:\*
- 5: sp\_invertebrate:\*
- 6: sp\_mammal:\*
- 7: sp\_mhc:\*
- 8: sp\_organelle:\*
- 9: sp\_phase:\*
- 10: sp\_plant:\*
- 11: sp\_rodent:\*
- 12: sp\_virus:\*
- 13: sp\_vertebrate:\*
- 14: sp\_unclassified:\*
- 15: sp\_virus:\*
- 16: sp\_bacteriap:\*
- 17: sp\_archaeap:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	253	11 Q9Z0T5	Q9Z0T5 meriones un
2	86	100.0	254	11 Q8VHV6	Q8VHV6 apodemus sy
3	86	100.0	254	11 Q9Z0T4	Q9Z0T4 sigmodon fu
4	86	100.0	254	11 Q9OYT9	Q9OYT9 mus musculu
5	77	89.5	124	6 Q8TU20	Q8TU20 varicia var
6	77	89.5	185	6 Q976S4	Q976S4 cervus nip
7	77	89.5	195	6 Q976S3	Q976S3 canis lupus
8	77	89.5	195	6 Q97903	Q97903 addax nasom
9	77	89.5	202	6 Q976S6	Q976S6 lama glama
10	77	89.5	202	6 Q97908	Q97908 capra nubia
11	77	89.5	204	6 Q976S9	Q976S9 odocoileus
12	77	89.5	204	6 Q976S7	Q976S7 odocoileus
13	77	89.5	204	6 Q976S8	Q976S8 odocoileus
14	77	89.5	209	6 Q97V02	Q97V02 camelus dro
15	77	89.5	211	6 Q77787	Q77787 antilocapra
16	77	89.5	212	6 Q976S8	Q976S8 cervus elap

17	77	89.5	213	6 Q9TV04	Q9TV04 canis fam11
18	77	89.5	214	6 Q9TV03	Q9TV03 canis fam11
19	77	89.5	215	11 Q81W3	Q81W3 spalax leuc
20	77	89.5	220	6 Q02825	Q02825 odocoileus
21	77	89.5	221	6 Q866V1	Q866V1 procavia ca
22	77	89.5	222	6 Q97913	Q97913 equus burch
23	77	89.5	222	6 Q7YRX1	Q7YRX1 procyon lot
24	77	89.5	223	6 Q97910	Q97910 hippocetrus
25	77	89.5	223	6 Q866W3	Q866W3 sorex ciner
26	77	89.5	224	6 Q81W4	Q81W4 spalax leuc
27	77	89.5	226	6 Q97907	Q97907 gazella sub
28	77	89.5	227	6 Q97964	Q97964 equus cabal
29	77	89.5	227	6 Q97905	Q97905 equus cabal
30	77	89.5	235	6 Q976S5	Q976S5 giraffa cam
31	77	89.5	240	11 Q8VHV4	Q8VHV4 microtus ag
32	77	89.5	242	6 Q866U5	Q866U5 cyclopes di
33	77	89.5	243	11 P97895	P97895 mesocricetu
34	77	89.5	245	6 Q9MZU7	Q9MZU7 odocoileus
35	77	89.5	246	6 Q866W9	Q866W9 cynocephalu
36	77	89.5	247	6 Q866V7	Q866V7 equus cabal
37	77	89.5	247	11 Q81W7	Q81W7 scirtus vul
38	77	89.5	248	6 Q866V6	Q866V6 diceros bic
39	77	89.5	248	6 Q866V0	Q866V0 orycleterops
40	77	89.5	248	11 Q8VHV5	Q8VHV5 clethrionom
41	77	89.5	250	6 Q866V8	Q866V8 manis sp. p
42	77	89.5	251	6 Q866U5	Q866U5 cyclopes di
43	77	89.5	254	6 Q976S8	Q976S8 orycleterops
44	77	89.5	256	6 Q866V7	Q866V7 capra hircu
45	77	89.5	256	6 Q97TUS	Q97TUS ovis aries

## ALIGNMENTS

RESULT 1

ID Q9Z0T5 PRELIMINARY; PRT; 253 AA.

AC Q9Z0T5;

DT 01-MAY-1999 (TREMBLrel. 10, Created)

DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)

DT 01-UTN-2003 (TREMBLrel. 24, Last annotation update)

DE Prion protein (Fragment).

OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;

OC Meriones.

OX NCBI\_TaxID=10047;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

RX MEDLINE=99303687; PubMed=10373359;

RA Mopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,

RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation

RT of flexible regions of the prion protein.";

RL J. Mol. Biol. 289:1163-1178(1999).

DR EMBL: AF117314; AAD1985.1;

DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion; 1.

DR Pfam: PF03991; Prion\_occupep; 6.

DR PRINTS: PR00341; PRION.

DR SMART: SMC0157; PRP; 1.

DR PROSITE: PS00291; PRION\_1; 1.

DR PROSITE: PS00706; PRION\_2; 1.

FT NON TER 253

SO SEQUENCE 253 AA; 27747 MT; B44D16867A97307F CRC64;

Query Match 100.0%; Score 86; DB 11; Length 253;

Best Local Similarity 100.0%; Pred. NO. 3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14  
 Db 142 NDMEERYRENNYR 155

## RESULT 2

OSVAV6 PRELIMINARY; PRT: 254 AA.  
 AC OSVAV6; 01-MAR-2002 (TrEMBLrel. 20, Created)  
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Prion protein.  
 GN PRP.  
 OS Apodemus sylvaticus (European woodmouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;  
 OC Apodemus.  
 OC NCB1\_TaxID=10129;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RA Dell'Ono G., Agrimi U., Di Bari M., Windl O., Vaccart G., Nomo R.,  
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;  
 RT "Easy transmission of sheep scrapie to wild rodents questions the  
 RT species barrier concept in the epidemiology of transmissible  
 RT sporiform encephalopathies.";  
 RT Submitted (Apr-2001) to the EMBL/Genbank/DBJ databases.  
 DR EMBL: AF367623; AAL57230.1; --  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion.1.  
 DR Pfam: PF03991; Prion octapep; 6.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 SQ SEQUENCE 254 AA; 27857 MW; CB2E5658C47A885 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14  
 Db 143 NDMEERYRENNYR 156

## RESULT 3

OSVAV6 PRELIMINARY; PRT: 254 AA.  
 AC OSVAV6; 01-MAY-1999 (TrEMBLrel. 10, Created)  
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Sigmodon fulviventer (tamny-bellied cotton rat).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;  
 OC Sigmodon.  
 OC NCB1\_TaxID=89246;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE:99303687; PubMed=10373359;  
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein.";  
 RT J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF11324; AAD1995.1; --  
 DR HSSP: P04925; IAG2.  
 DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; prion.1.  
 DR Pfam: PF03991; Prion octapep; 6.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DR NON TER 254  
 FT 254  
 SQ SEQUENCE 254 AA; 27904 MW; 9EE7E1D106BA3B97 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14  
 Db 143 NDMEERYRENNYR 156

## RESULT 4

OSVAV6 PRELIMINARY; PRT: 254 AA.  
 AC OSVAV6; 01-MAY-2000 (TrEMBLrel. 13, Created)  
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Long incubation prion protein.  
 GN PRNP.  
 OS Mus musculus (Mouse).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
 OC NCB1\_TaxID=10090;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE:99018115; PubMed=9799790;  
 RA Lee I.Y., Westaway D., Smit A.F., Wang K., Seto J., Chen L.,  
 RA Acharya C., Ankener M., Baeklin D., Cooper C., Yao H., Prusiner S.B.,  
 RA Hood L.E.;  
 RT "Complete genomic sequence and analysis of the prion protein gene  
 RT region from three mammalian species.";  
 RT Genome Res. 8:1022-1037(1998).  
 RN [2]  
 RP SEQUENCE FROM N.A.  
 RX MEDLINE:99457485; PubMed=10525406;  
 RA Moore R.C., Lee I.Y., Silverman G.L., Harrison P.M., Strome R.,  
 RA Heinrich C., Karunaratne A., Pasternak S.H., Chishti M.A., Jiang Y.,  
 RA Mastrogelo P., Wang K., Smit A.F.A., Katamine S., Carlson G.A.,  
 RA Cohen F.E., Prusiner S.B., Melton D.W., Tremblay P., Hood L.E.,  
 RA Westaway D.;  
 RT "Ataxia in prion protein (PrP)-deficient mice is associated with  
 RT upregulation of the novel PrP-like protein Doppel.";  
 RT J. Mol. Biol. 292:797-817(1999).  
 RL U. Mol. Biol. 292:797-817(1999).  
 DR EMBL: U29187; AADA1440.1; --  
 DR HSSP: P04925; IAG2.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; prion.1.  
 DR Pfam: PF03991; Prion octapep; 6.  
 DR PRINTS: PR00341; PRION.  
 DR SMART: SM00157; PRP; 1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 KW Prion.  
 SQ SEQUENCE 254 AA; 28010 MW; DF90DCE5E8C6C0 CRC64;

Query Match 100.0%; Score 86; DB 11; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 3e-05;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEERYRENNYR 14  
 Db 142 NDMEERYRENNYR 155

## RESULT 5

OSVAV6 PRELIMINARY; PRT: 254 AA.  
 AC OSVAV6; 01-MAY-1999 (TrEMBLrel. 10, Created)  
 DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)  
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Sigmodon fulviventer (tamny-bellied cotton rat).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;  
 OC Sigmodon.  
 OC NCB1\_TaxID=89246;  
 RX [1]  
 RP SEQUENCE FROM N.A.  
 RA MEDLINE:99303687; PubMed=10373359;  
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein.";  
 RT J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL: AF11324; AAD1995.1; --  
 DR HSSP: P04925; IAG2.  
 DR InterPro: IPR000817; Prion.

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09TU20
ID 09TU20 PRELIMINARY; PRT; 124 AA.
AC 09TU20;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Varecia variagata variagata.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Strepsirhini; Lemnidae; Varecia.
OX NCBI_TaxID=87289;
RN [1]
RP SEQUENCE FROM N.A.
RA Gilch S., Schatzl H.M.;
RT "Unusual prion protein octarepeat structure of the highly BSE-
RT susceptible Lemur monkey.";
RL Submitted (AUG-1999) to the EMBL/GenBank/DBJ databases.
DR EMBL; AF177293; AAD54335.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR Pfam; PF03991; Prion_octapep; 3.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
FT NON TER 1
FT NON TER 1
SQ SEQUENCE 124 AA; 13436 MW; CC2GBA5A85A7C94 CRC64;

Query Match
Best Local Similarity 89.5%; Score 77; DB 6; Length 124;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDWEDRYRENNMYR 14
Db 76 NDYEDRYRENNMYR 89

RESULT 6
097694 PRELIMINARY; PRT; 185 AA.
AC 097694;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Cervus nippon dybowskii.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
OC Cervidae; Cervinae; Cervus.
OX NCBI_TaxID=88066;
RN [1]
RP SEQUENCE FROM N.A.
RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
RT "Is codon 129 of prion protein polymorphic in human beings but not in
RT animals?";
RL Lancet 349:1603-1604(1997).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL; AF113941; AAD13289.1; -.
DR HSSP; P10278; IDWY.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion_1.
DR Pfam; PF03991; Prion_octapep; 5.
DR SMART; SM00157; PRP; 1.

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DR PROSITE; PS00291; PRION_1; 1.
FT NON TER 1
FT NON TER 1
SQ SEQUENCE 185 AA; 19870 MW; BB87C7658BC6E79 CRC64;

Query Match
Best Local Similarity 89.5%; Score 77; DB 6; Length 185;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDWEDRYRENNMYR 14
Db 122 NDYEDRYRENNMYR 135

RESULT 7
097693 PRELIMINARY; PRT; 195 AA.
AC 097693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL; AF113939; AAD12063.1; -.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion_1.
DR Pfam; PF03991; Prion_octapep; 5.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON TER 1
FT NON TER 1
SQ SEQUENCE 195 AA; 21097 MW; 9D18EAEB9A5D031 CRC64;

Query Match
Best Local Similarity 89.5%; Score 77; DB 6; Length 195;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NDWEDRYRENNMYR 14
Db 106 NDYEDRYRENNMYR 119

RESULT 8
097903 PRELIMINARY; PRT; 195 AA.
AC 097903;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN PRP.
OS Addax nasomaculatus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Hippotraginae; Addax.
OX NCBI_TaxID=59515;
RN [1]
RP SEQUENCE FROM N.A.
RT Tissue=Peripheral blood leukocytes;

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EX MEDLINE=99303687; PubMed=10373359;  
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein."  
 J. Mol. Biol. 289:1163-1176(1999).  
 DR EMBL: AF117309; AAD19990.1; --  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion.1.  
 DR SMART: SMO0157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 195  
 FT SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AECAC9 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 195;  
 Best Local Similarity 92.9%; Pred. No. 0.00054;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14  
 DB 110 NDYEDRYRENMYR 123

## RESULT 9

QY 097696 PRELIMINARY; PRT; 202 AA.  
 AC 097696;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Lama glama (Llama).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.  
 OX NCBI\_Taxid=9844;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RA MEDLINE=99303687; PubMed=10373359;  
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein."  
 J. Mol. Biol. 289:1163-1176(1999).  
 DR EMBL: AF117309; AAD19990.1; --  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion.1.  
 DR SMART: SMO0157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 195  
 FT SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AECAC9 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 202;  
 Best Local Similarity 92.9%; Pred. No. 0.00056;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14  
 DB 106 NDYEDRYRENMYR 119

RESULT 10  
 QY 097908 PRELIMINARY; PRT; 202 AA.  
 AC 097908;

DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Capra nubiana (Nubian ibex).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
 OC Bovidae; Caprinae; Capra.  
 OX NCBI\_Taxid=72543;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RC TISSUE=Periphera blood leukocytes;  
 RX MEDLINE=99303687; PubMed=10373359;  
 RA Koprner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation  
 RT of flexible regions of the prion protein."  
 J. Mol. Biol. 289:1163-1176(1999).  
 DR EMBL: AF117319; AAD19990.1; --  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion.1.  
 DR SMART: SMO0157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 202  
 FT SEQUENCE 202 AA; 21949 MW; DB0634A43B4DE77F CRC64;

Query Match 89.5%; Score 77; DB 6; Length 202;  
 Best Local Similarity 92.9%; Pred. No. 0.00056;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENMYR 14  
 DB 118 NDYEDRYRENMYR 131

RESULT 11  
 QY 097629 PRELIMINARY; PRT; 204 AA.  
 AC 097629;  
 DT 01-MAY-1999 (TREMBLrel. 10, Created)  
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)  
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.  
 OS Odocoileus virginianus (White-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;  
 OC Cervidae; Odocoileinae; Odocoileus.  
 OX NCBI\_Taxid=9874;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "Prp alleles in free ranging and captive white tailed deer (Odocoileus  
 RT virginianus)."  
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 DR EMBL: AF091558; AAC69626.1; --  
 DR HSSP: P10279; IDWY.  
 DR InterPro: IPR000817; Prion.  
 DR Pfam: PF00377; Prion.1.  
 DR SMART: SMO0157; PRP.1.  
 DR PROSITE: PS00291; PRION\_1; 1.  
 DR PROSITE: PS00706; PRION\_2; 1.  
 FT NON\_TER 1 204  
 FT SEQUENCE 204 AA; 22154 MW; CA8AB68F2B49C81E CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;  
 Best Local Similarity 92.9%; Pred. No. 0.00056;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMDRYRENNMYR 14  
 ||:|||||  
 Db 123 NDYEDRYRENNMYR 136

RESULT 12  
 Q9TSI7 PRELIMINARY; PRT; 204 AA.

ID Q9TSI7  
 AC Q9TSI7  
 DT 01-MAY-2000 (TRENBLrel. 13, Created)  
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)  
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.

OS Odocoileus virginianus (White-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;  
 OC Cervidae; Odocoileinae; Odocoileus.

OX NCBI\_TaxID=9874;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "PrP alleles in free ranging and captive white tailed deer (Odocoileus  
 virginianus).";  
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.

DR EMBL; AF091560; AAC69628.1; -  
 DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.

DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.

DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 204 204

SQ SEQUENCE 204 AA; 22184 MW; CA9BA283AF54081E CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;  
 Best Local Similarity 92.9%; Pred. No. 0.00056;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMDRYRENNMYR 14  
 ||:|||||  
 Db 123 NDYEDRYRENNMYR 136

RESULT 13  
 Q9TSI8 PRELIMINARY; PRT; 204 AA.

ID Q9TSI8  
 AC Q9TSI8  
 DT 01-MAY-2000 (TRENBLrel. 13, Created)  
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)  
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.

OS Odocoileus virginianus (White-tailed deer).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;  
 OC Cervidae; Odocoileinae; Odocoileus.

OX NCBI\_TaxID=9874;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RC TISSUE=Brain;  
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
 RT "PrP alleles in free ranging and captive white tailed deer (Odocoileus  
 virginianus).";  
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
 DR EMBL; AF091559; AAC69627.1; -

DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.  
 DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.

DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.  
 DR PROSITE; PS00706; PRION\_2; 1.  
 FT NON\_TER 1 1  
 FT NON\_TER 204 204

SQ SEQUENCE 204 AA; 22181 MW; CA962B93FA84D4D3 CRC64;

Query Match 89.5%; Score 77; DB 6; Length 204;  
 Best Local Similarity 92.9%; Pred. No. 0.00056;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMDRYRENNMYR 14  
 ||:|||||  
 Db 123 NDYEDRYRENNMYR 136

RESULT 14  
 Q9TV02 PRELIMINARY; PRT; 209 AA.

ID Q9TV02  
 AC Q9TV02  
 DT 01-MAY-2000 (TRENBLrel. 13, Created)  
 DT 01-MAY-2000 (TRENBLrel. 13, Last sequence update)  
 DT 01-UTN-2003 (TRENBLrel. 24, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.

OS Camelus dromedarius (Dromedary) (Arabian camel).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.

OX NCBI\_TaxID=9838;  
 RN [1]  
 RP SEQUENCE FROM N.A.

RA MEDLINE; 9303687; PubMed; 10373359;  
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,  
 RA Schwarz T.F., Werner T., Schatzl H.M.;  
 RT "Analysis of 27 mammalian and 9 avian prps reveals high conservation  
 of flexible regions of the prion protein.";

RL J. Mol. Biol. 289:1163-1178(1999).  
 DR EMBL; AF113940; AAD13288.1; -

DR HSSP; P10279; IDWY.  
 DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.  
 DR Pfam; PF03991; Prion\_octapep; 5.

DR PRINTS; PR00341; PRION.  
 DR SMART; SM00157; PRP; 1.  
 DR PROSITE; PS00291; PRION\_1; 1.

FT NON\_TER 1 1  
 FT NON\_TER 209 209  
 SQ SEQUENCE 209 AA; 22506 MW; 201E1AA9B38458EA CRC64;

Query Match 89.5%; Score 77; DB 6; Length 209;  
 Best Local Similarity 92.9%; Pred. No. 0.00058;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMDRYRENNMYR 14  
 ||:|||||  
 Db 109 NDYEDRYRENNMYR 122

RESULT 15  
 Q77787 PRELIMINARY; PRT; 211 AA.

ID Q77787  
 AC Q77787  
 DT 01-NOV-1998 (TRENBLrel. 08, Created)  
 DT 01-NOV-1998 (TRENBLrel. 08, Last sequence update)  
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)  
 DE Prion protein (Fragment).  
 GN PRP.

OS Antilocapra americana (Pronghorn).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;



OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;  
OC Antilocapridae; Antilocapra.  
OK NCBI\_taxID=9891;  
RN (1)  
RP SEQUENCE FROM N.A.  
RC TISSUE=Brain;  
RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;  
RT "Pr gene of pronghorn antelope (Antilocapra americana) contains 6  
octapeptide repeats";  
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.  
DR EMBL; AF090852; AAC43030.1; -  
DR HSSP; P10279; IDNY.  
DR InterPro; IPR000817; Prion.  
DR Pfam; PF00377; Prion; 1.  
DR SMART; SM00157; PRP; 1.  
DR PROSITE; PS00291; PRION\_1; 1.  
DR PROSITE; PS00706; PRION\_2; 1.  
FT NON\_TER 1  
FT NON\_TER 1  
SQ SEQUENCE 211 AA; 22832 MW; B9E147AADF9A6752 CRC64;  
  
Query Match 89.5%; Score 77; DB 6; Length 211;  
Best Local Similarity 92.9%; Pred. No. 0.00058;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 NDVEDRYRENMYR 14  
||:|||||  
DB 131 NDVEDRYRENMYR 144

Search completed: April 30, 2004, 15:31:21  
Job time : 30.4583 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:14 ; Search time 10.203 Seconds  
(without alignments)  
131.920 Million cell updates/sec

Title: US-09-603-832-5  
Perfect score: 86  
Sequence: 1 NDWEDRYRNMNR 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 203366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 203366

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :  
1: pir1:\*  
2: pir2:\*  
3: pir3:\*  
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	226	2 A53892	prion-related prot
2	86	100.0	254	2 A23544	major prion protei
3	77	89.5	232	2 S71041	major prion protei
4	77	89.5	239	2 S53633	major prion protei
5	77	89.5	241	2 S71056	major prion protei
6	77	89.5	241	2 S71048	major prion protei
7	77	89.5	245	2 S53627	major prion protei
8	77	89.5	245	2 S71045	major prion protei
9	77	89.5	252	2 I61848	major prion protei
10	77	89.5	252	2 UC6175	major prion protei
11	77	89.5	252	2 S53634	major prion protei
12	77	89.5	252	2 S53631	major prion protei
13	77	89.5	253	2 I84423	major prion protei
14	77	89.5	253	2 S53618	major prion protei
15	77	89.5	253	2 S53619	major prion protei
16	77	89.5	253	2 S53620	major prion protei
17	77	89.5	253	2 S71055	major prion protei
18	77	89.5	253	2 S53623	major prion protei
19	77	89.5	253	2 S53624	major prion protei
20	77	89.5	253	2 S53616	major prion protei
21	77	89.5	253	2 S53616	major prion protei
22	77	89.5	254	1 UH9YTH	major prion PrP-Sc
23	77	89.5	254	2 B34759	prion protein - ch
24	77	89.5	254	2 B34759	prion protein - ch
25	77	89.5	256	2 S37149	major prion protei
26	77	89.5	256	2 A54281	major prion protei
27	77	89.5	257	2 A23545	major prion protei
28	77	89.5	257	2 J01900	major prion protei
29	77	89.5	260	2 S53629	major prion protei

30	72	83.7	256	2 JU0268	major prion protei
31	72	83.7	264	2 S37137	prion protein - gr
32	67	77.9	253	1 UH9J	major prion protei
33	67	77.9	253	2 I37032	major prion protei
34	67	77.9	253	2 S53635	prion protein - si
35	67	77.9	253	2 I61847	major prion protei
36	67	77.9	253	2 S53617	major prion protei
37	67	77.9	253	2 S53614	major prion protei
38	67	77.9	264	2 A54330	major prion protei
39	55	64.0	447	2 A64934	Succinylarginine d
40	55	64.0	447	2 C90935	hypotheical prote
41	55	64.0	447	2 G85783	hypotheical prote
42	48	55.8	447	2 AG0709	Succinylarginine d
43	46	53.5	703	2 A64351	hypotheical prote
44	44.5	51.7	567	2 G90537	lipoprotein (impor
45	44	51.2	218	2 S10613	ribosomal protein

## ALIGNMENTS

RESULT 1  
A53892  
prion-related protein - rat (fragment)  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 07-Oct-1994 #sequence\_revision 07-Oct-1994 #text\_change 13-Aug-1999  
C:Accession: A53892  
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.  
Lab. Invest. 57, 370-374, 1987  
A:Title: Cloning of rat "prion-related protein" cDNA.  
A:Reference number: A53892; MUID:88037055; PMID:2889848  
A:Accession: A53892  
A:Status: preliminary  
A:Molecule type: mRNA  
A:Residues: 1-226 <L1A>  
A:Cross-references: GB:M20313; NID:G206391; PIDN:AAA1947.1; PID:G206392  
C:Superfamily: major prion protein

Query Match 100.0%; Score 86; DB 2; Length 226;  
Best Local Similarity 100.0%; Pred. No. 2.7e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNMNR 14  
DB 115 NDWEDRYRNMNR 128

## RESULT 2

A23544  
major prion protein precursor - mouse  
N:Alternate names: PrP; Scrapie prion  
C:Species: Mus musculus (house mouse)  
C:Date: 22-Jul-1987 #sequence\_revision 22-Jul-1987 #text\_change 11-Aug-2003  
C:Accession: A23544; A23544; S02521; A22315  
R:Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.  
Cell 51, 651-662, 1987  
A:Title: Distinct prion proteins in short and long scrapie incubation period mice.  
A:Reference number: A23544; MUID:88052669; PMID:2890436  
A:Accession: A23544  
A:Molecule type: DNA  
A:Residues: 1-254 <MES>  
A:Cross-references: GB:M18070; NID:G200528; PIDN:AAA3997.1; PID:G200529  
A:Experimental source: strains NZW and I/LmJ  
A>Note: the sequence shown is from the NZW strain, the sequence from the I/LmJ strain d  
R:Locher, C.; Cheesbro, B.; Race, R.; Keith, J.M.  
Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986  
A:Reference number: A23544; MUID:86313583; PMID:3462700  
A:Accession: A23544  
A:Molecule type: mRNA  
A:Residues: 1-254 <LOC>  
A:Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.  
Eur. J. Biochem. 172, 271-277, 1988  
A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A/Accession: S02521; MUID:88166695; PMID:2894984  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: protein  
 A/Residues: 1-254 <HOP>  
 R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.; Nature 315, 331-333, 1985  
 A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u  
 A/Reference number: A22315; MUID:85213844; PMID:3923361  
 A/Accession: A22315  
 A/Molecule type: mRNA  
 A/Residues: 87-132, 'V', 134-164 <CHB>  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl  
 F.1-23/Domain: signal sequence #status predicted <STG>  
 F.23-231/Product: major prion protein #status predicted <MAT>  
 F.232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>  
 F.178-213/Dsulfide bonds: #status predicted  
 F.180,196/Binding site: carbohydrate (Asn) (covalent) #status predicted  
 F.231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 86; DB 2; Length 254;  
 Best Local Similarity 100.0%; Pred. No. 3e-06;  
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||:|||||  
 Db 142 NDWEDRYRENMYR 155

RESULT 3  
 S71041  
 major prion protein - black-handed spider monkey (fragment)  
 C/Species: Ateles geoffroyi (black-handed spider monkey)  
 C/Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S71041; S53630  
 R/Schaeztl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71041  
 A/Molecule type: DNA  
 A/Residues: 1-232 <SCH>  
 A/Cross-references: EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g474377  
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53630  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-194, 'R', 196-231 <SCW>  
 A/Cross-references: EMBL:U08309  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 232;  
 Best Local Similarity 92.9%; Pred. No. 7.3e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||:|||||  
 Db 127 NDWEDRYRENMYR 140

RESULT 4  
 S53633  
 major prion protein - douroucoul (fragment)  
 C/Species: Aotus trivirgatus (douroucoul, night monkey, owl monkey)  
 C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S53633; S71042  
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 U. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53633  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-239 <SCH>  
 A/Cross-references: EMBL:U08293  
 R/Schaeztl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71042  
 A/Molecule type: DNA  
 A/Residues: 1-202, 'E', 204-239 <SCW>  
 A/Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 239;  
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||:|||||  
 Db 135 NDWEDRYRENMYR 148

RESULT 5  
 S71056  
 major prion protein - mandrill (fragment)  
 C/Species: Papio sphinx, Mandrillus sphinx (mandrill)  
 C/Date: 27-Oct-1996 #sequence\_revision 14-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S71056; S53621  
 R/Schaeztl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71056  
 A/Molecule type: DNA  
 A/Residues: 1-241 <SCH>  
 A/Cross-references: EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474365  
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53621  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-203, 'R', 205-240 <SCW>  
 A/Cross-references: EMBL:U08303  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 241;  
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
 |||:|||||  
 Db 136 NDWEDRYRENMYR 149

RESULT 6  
 S71048  
 major prion protein - Callithrix jacchus (fragment)  
 C/Species: Callithrix jacchus (Callithrix jacchus)  
 C/Date: 27-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S71048; S53632  
 R/Schaeztl, H.M.  
 submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71048  
 A/Molecule type: DNA  
 A/Residues: 1-241 <SCH>  
 A/Cross-references: EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g475586  
 R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53612  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-203, 'R', 205-240 <SCW>  
 A/Cross-references: EMBL:U08312  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 241;  
 Best Local Similarity 92.9%; Pred. No. 7.6e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEEDRYRNNMYR 14  
 DB 136 NDYEDRYRNNMYR 149

## RESULT 7

major prion protein - green monkey  
 C/Species: Cercopithecus aethiops (green monkey, grivet)  
 C/Date: 28-Oct-1996 #sequence\_revision 07-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S53627; S71043  
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53627  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA  
 A/Residues: 1-245 <SCH>  
 A/Cross-references: EMBL:U08291  
 R/Schaezel, H.M.  
 Submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71043  
 A/Molecule type: DNA  
 A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>  
 A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;  
 Best Local Similarity 92.9%; Pred. No. 7.8e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEEDRYRNNMYR 14  
 DB 135 NDYEDRYRNNMYR 148

## RESULT 8

major prion protein - Cercopithecus diana  
 C/Species: Cercopithecus diana  
 C/Date: 14-Feb-1997 #sequence\_revision 14-Feb-1997 #text\_change 11-Aug-2003  
 C/Accession: S71045; S53628  
 R/Schaezel, H.M.  
 Submitted to the EMBL Data Library, April 1994  
 A/Reference number: S71041  
 A/Accession: S71045  
 A/Molecule type: DNA  
 A/Residues: 1-245 <SCH>  
 A/Cross-references: EMBL:U08292; NID:9474342; PIDN:AAC50081.1; PID:9474343  
 R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
 J. Mol. Biol. 245, 362-374, 1995  
 A/Title: Prion protein gene variation among primates.  
 A/Reference number: S53614; MUID:95139066; PMID:7837269  
 A/Accession: S53628  
 A/Status: nucleic acid sequence not shown  
 A/Molecule type: DNA

A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>  
 A/Cross-references: EMBL:U08292  
 C/Superfamily: major prion protein  
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 245;  
 Best Local Similarity 92.9%; Pred. No. 7.8e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEEDRYRNNMYR 14  
 DB 135 NDYEDRYRNNMYR 148

## RESULT 9

major prion protein precursor - common squirrel monkey  
 C/Species: Saimiri sciureus (common squirrel monkey)  
 C/Date: 31-May-1996 #sequence\_revision 31-May-1996 #text\_change 13-Aug-1999  
 C/Accession: I61848  
 R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; I  
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994  
 A/Title: Infectious amyloid precursor gene sequences in primates used for experimental  
 A/Reference number: I6907; MUID:95083661; PMID:7991600  
 A/Accession: I61848  
 A/Status: preliminary; translated from GB/EMBL/DBJ  
 A/Molecule type: DNA  
 A/Residues: 1-252 <RES>  
 A/Cross-references: EMBL:U15165; NID:9595852; PIDN:AAA68636.1; PID:9595853  
 C/Superfamily: major prion protein

Query Match 89.5%; Score 77; DB 2; Length 252;  
 Best Local Similarity 92.9%; Pred. No. 8e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEEDRYRNNMYR 14  
 DB 142 NDYEDRYRNNMYR 155

## RESULT 10

prion protein - rabbit  
 C/Species: Oryctolagus cuniculus (domestic rabbit)  
 C/Date: 11-Apr-1997 #sequence\_revision 09-May-1997 #text\_change 13-Aug-1999  
 C/Accession: J66175  
 R/Liotus, B.; Rogers, M.  
 Gene 184, 215-219, 1997  
 A/Title: Characterization of a prion protein (PrP) gene from rabbit; a species with app  
 A/Reference number: J66175; MUID:97183665; PMID:9031631  
 A/Accession: J66175  
 A/Molecule type: DNA  
 A/Residues: 1-252 <LOF>  
 A/Cross-references: GB:U08334; NID:91490412; PIDN:AAC4697.1; PID:91490413  
 C/Comment: This protein is a cellular protein, it is involved in the neurodegenerative  
 C/Genetics:  
 A/Gene: PrP  
 C/Superfamily: major prion protein  
 C/Keywords: disulfide bond; prion

Query Match 89.5%; Score 77; DB 2; Length 252;  
 Best Local Similarity 92.9%; Pred. No. 8e-05;  
 Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEEDRYRNNMYR 14  
 DB 142 NDYEDRYRNNMYR 155

## RESULT 11

major prion protein - common marmoset  
 C/Species: Callithrix jacchus (common marmoset)

```

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
A/Accession: S53634; S71047
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53634
A/Molecule type: DNA
A/Status: nucleic acid sequence not shown
A/Residues: 1-252 <SCH>
A/Cross-references: EMBL:U08304
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71047
A/Molecule type: DNA
A/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 252;
Best Local Similarity 92.9%; Pred. No. 8e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDMDRYRYRNNMYR 14
      ||:|||||
Db      142 NDYEDRYRYRNNMYR 155

RESULT 12
553631
major prion protein - brown capuchin
C/Species: Cebus apella (brown capuchin, black-capped capuchin)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
A/Accession: S53631; S71044
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53631
A/Molecule type: DNA
A/Status: nucleic acid sequence not shown
A/Residues: 1-252 <SCH>
A/Cross-references: EMBL:U08295
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71044
A/Molecule type: DNA
A/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 252;
Best Local Similarity 92.9%; Pred. No. 8e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDMDRYRYRNNMYR 14
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Db      142 NDYEDRYRYRNNMYR 155

RESULT 13
184423
major prion protein precursor - rhesus macaque
C/Species: Macaca mulatta (rhesus macaque)
C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 11-Aug-2003
A/Accession: I84423; S53622; S71054
R/Cervenkova, L.; Brown, F.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

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A/Reference number: I86907; MUID:95083661; PMID:7991600
A/Accession: I84423
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: EMBL:U15163; NID:g595850; PIDN:AA66635.1; PID:g595851
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53622
A/Molecule type: DNA
A/Status: nucleic acid sequence not shown
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08307
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71054
A/Molecule type: DNA
A/Residues: 1-253 <SCW>
A/Cross-references: EMBL:U08307; NID:g474372; PIDN:AAC50095.1; PID:g474373
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 253;
Best Local Similarity 92.9%; Pred. No. 8e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDMDRYRYRNNMYR 14
      ||:|||||
Db      143 NDYEDRYRYRNNMYR 156

RESULT 14
553618
major prion protein - Colobus guereza
C/Species: Colobus guereza
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
A/Accession: S53618; S71046
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53618
A/Molecule type: DNA
A/Status: nucleic acid sequence not shown
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08297
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71046
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08297; NID:g474352; PIDN:AAC50086.1; PID:g474353
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      89.5%; Score 77; DB 2; Length 253;
Best Local Similarity 92.9%; Pred. No. 8e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY      1 NDMDRYRYRNNMYR 14
      ||:|||||
Db      143 NDYEDRYRYRNNMYR 156

RESULT 15
553619
major prion protein - Presbytis francoisi
C/Species: Presbytis francoisi
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

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C:Accession: S53619; S71057  
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.  
U: Mol. Biol. 245, 362-374, 1995  
A:Title: Prion protein gene variation among primates.  
A:Reference number: S53614; MUID:95139066; PMID:7837269  
A:Accession: S53619  
A:Status: nucleic acid sequence not shown  
A:Molecule type: DNA  
A:Residues: 1-253 <SCH>  
A:Cross-References: EMBL:U08302  
R:Schaetzl, H.M.  
submitted to the EMBL Data Library, April 1994  
A:Reference number: S71041  
A:Accession: S71057  
A:Molecule type: DNA  
A:Residues: 1-210, 'E', 212-253 <SCW>  
A:Cross-References: EMBL:U08302; NID:G1396067; PID:AA03105.1; PID:G1396068  
C:Superfamily: major prion protein  
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 89.5%; Score 77; DB 2; Length 253;  
Best local similarity 92.9%; Pred. No. 8e-05;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDWEDRYRNNMYR 14  
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DB 143 NDYEDRYRNNMYR 156

Search completed: April 30, 2004, 15:32:08  
Job time : 10.2083 secs

GenCore version 5.1.6  
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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:26:13 ; Search time 6.70833 Seconds  
(without alignments)

108.668 Million cell updates/sec

Title: US-09-603-832-5

Sequence: 1 NDMEDRYRENTMR 14

Scoring table: BLOSUM62  
Gapop 10.0, Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database: SwissProt\_42:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	86	100.0	254	1	P04925 mus musculus
2	86	100.0	254	1	P13852 rat mus musculus
3	86	100.0	254	1	P09053 sigmodon hi
4	86	100.0	254	1	P09053 sigmodon hi
5	86	100.0	254	1	P09053 sigmodon hi
6	86	100.0	254	1	P09053 sigmodon hi
7	86	100.0	254	1	P09053 sigmodon hi
8	86	100.0	254	1	P09053 sigmodon hi
9	86	100.0	254	1	P09053 sigmodon hi
10	86	100.0	254	1	P09053 sigmodon hi
11	86	100.0	254	1	P09053 sigmodon hi
12	86	100.0	254	1	P09053 sigmodon hi
13	86	100.0	254	1	P09053 sigmodon hi
14	86	100.0	254	1	P09053 sigmodon hi
15	86	100.0	254	1	P09053 sigmodon hi
16	86	100.0	254	1	P09053 sigmodon hi
17	86	100.0	254	1	P09053 sigmodon hi
18	86	100.0	254	1	P09053 sigmodon hi
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28	86	100.0	254	1	P09053 sigmodon hi
29	86	100.0	254	1	P09053 sigmodon hi
30	86	100.0	254	1	P09053 sigmodon hi
31	86	100.0	254	1	P09053 sigmodon hi
32	86	100.0	254	1	P09053 sigmodon hi
33	86	100.0	254	1	P09053 sigmodon hi

34	73	84.9	255	1	P04925 mus musculus
35	72	83.7	256	1	P04925 mus musculus
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## ALIGNMENTS

Result ID	Score	Query Match	Length	DB ID	Description
1	86	100.0	254	1	P04925 mus musculus
2	86	100.0	254	1	P13852 rat mus musculus
3	86	100.0	254	1	P09053 sigmodon hi
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6	86	100.0	254	1	P09053 sigmodon hi
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9	86	100.0	254	1	P09053 sigmodon hi
10	86	100.0	254	1	P09053 sigmodon hi
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13	86	100.0	254	1	P09053 sigmodon hi
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15	86	100.0	254	1	P09053 sigmodon hi
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RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,  
 RA Bosak S.A., McEvan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,  
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,  
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,  
 RA Fahy J., Helton E., Kettelman M., Madan A., Rodrigues S., Sanchez A.,  
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,  
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,  
 RA Butterfield Y.S.N., Krzywnski M.I., Skalska U., Smallue D.E.,  
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,  
 RT "Generation and initial analysis of more than 15,000 full-length  
 RT human and mouse cDNA sequences.";  
 RT Proc. Natl. Acad. Sci. U.S.A. 99:16699-16903(2002).  
 [6]  
 RP SEQUENCE OF 87-164 FROM N.A.  
 RX MEDLINE=85213844; PubMed=3923361;  
 RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,  
 RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.,  
 RT "Identification of scrapie prion protein-specific mRNA in scrapie-  
 RT infected and uninfected brain.";  
 RT Nature 315:331-333(1985).  
 [7]  
 RP STRUCTURE BY NMR OF 120-230.  
 RX MEDLINE=96317593; PubMed=8700211;  
 RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,  
 RA Muehrich K.,  
 RT "NMR structure of the mouse prion protein domain PrP(121-321).";  
 RT Nature 382:180-182(1996).  
 [8]  
 RP STRUCTURE BY NMR OF 23-231.  
 RX MEDLINE=97424376; PubMed=9280298;  
 RA Riek R., Hornemann S., Wider G., Glockshuber R., Muehrich K.,  
 RT "NMR characterization of the full-length recombinant murine prion  
 RT protein, mPrP(23-231).";  
 RT FEBS Lett. 413:282-288(1997).  
 [9]  
 RP HYDROXYLATION OF PRO-44.  
 RX MEDLINE=20490364; PubMed=11032800;  
 RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,  
 RA Bocking S.P., Rhee A.G.O., Bennett A.D., Hope J.,  
 RT "Post-translational hydroxylation at the N-terminus of the prion  
 RT protein reveals presence of PrP structure in vivo.";  
 RT EMBO J. 19:5324-5331(2000).  
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
 CC host genome and is expressed both in normal and infected cells.  
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
 CC "rods".  
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
 CC CREEFTFEJDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
 CC -1- SIMILARITY: Belongs to the prion family.  
 CC  
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 DR EMBL, BC006703; AA06703.1; -  
 DR EMBL, M30384; AAA3999.1; -  
 DR PIR, A29669; A23544.  
 DR PDB: 1AG2, 08-OCT-97.  
 DR MGD: MGI:97769; Prnp.  
 DR GO: GO:0005783; C:cytoplasmic reticulum; IDA.

DR GO: GO:0005794; C:Golgi apparatus; IDA.  
 DR GO: GO:0005866; C:plasma membrane; IDA.  
 DR GO: GO:0005507; F:copper ion binding; IDA.  
 DR GO: GO:0006979; P:response to oxidative stress; IDA.  
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 DR Pfam: PF00377; Prion; 1.  
 DR Pfam: PF03991; Prionoctapep; 6.  
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 DB 142 NMEDRYRENNYR 155  
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 AC P13852;  
 DT 01-JAN-1990 (Rel. 13, Created)  
 DT 01-NOV-1997 (Rel. 35, Last sequence update)  
 DT 15-MAR-2004 (Rel. 43, Last annotation update)  
 DE Major prion protein precursor (PrP).  
 GN PRNP OR PRN.  
 OS Rattus norvegicus (Rat).  
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
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 RA Gomi H., Ikeda T., Kunieda T., Itohara S., Prusiner S.B.,  
 RA Yamanouchi K.,  
 RT "Prion protein (PrP) is not involved in the pathogenesis of



RT Spongiform encephalopathy in zitter rats. ;  
RN Neurosci. Lett. 166:171-174(1994).  
[2]  
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RC STRAIN=Wistar; TISSUE=Liver;  
RX MEDLINE=7033369; PubMed=8879116;  
RA Sasaki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;  
RT "three-exon structure of the gene encoding the rat prion protein and  
its expression in tissues. ;  
RL Virus Genes 12:15-20(1996).  
[3]  
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RX MEDLINE=8803705; PubMed=2889948;  
RA Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,  
RA Clawson G.A.;  
RT "Cloning of rat 'prion-related protein' cDNA. ;  
RL Lab. Invest. 57:370-374(1987).  
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the  
CC host genome and is expressed both in normal and infected cells.  
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called  
CC "rod".  
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.  
CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS  
CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,  
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME  
CC (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),  
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.  
CC -1- SIMILARITY: Belongs to the prion family.  
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CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
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CC  
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CC EMBL; D50093; BAA08790.1; -;  
CC EMBL; M2013; AAA41947.1; -;  
CC PIR; A53892; A53892.  
CC HSSP; P04925; IAG2.  
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CC SMART; SMO0157; PRP; 1.  
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CC Prion; Glycoprotein; GPI-anchor; Repeat; signal; Lipoprotein.  
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Best Local Similarity 100.0%; Pred.No.1,3e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 NDMDRRYYRNNYR 14  
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Db          143 NMEDRRYRENMXR 156

RESULT 3
ID_PRT; 254 AA.
PRIO_SIGHI STANDARD;
AC Q92073;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DB Major prion protein precursor (PrP).
PRT OR PrP.
OS Stymodon hispidus (Hispid cotton rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Sigmodontinae;
OC Sigmodon.
OX NCBI_TaxID=42415;
[1]
RN SEQUENCE FROM N.A.
RP TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Glöck S.,
  Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
  of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
  host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
  "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
  ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
  CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
  (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
  TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
-----
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-----
CC EMBL; AF117325; AAD19996.1; -.
CC HSSP; P04925; 1AG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion.
CC Pfam; PF003991; Prion octapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PrP; 1.
CC DR PROSITE; PS00291; PRION_1; 1.
CC DR PROSITE; PS00706; PRION_2; 1.
CC KX Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC FT SIGNAL 1 22
CC FT CHAIN 23 254
CC FT DOMAIN 51 91
CC FT REPEAT 51 59
CC FT REPEAT 60 67
CC FT REPEAT 68 75
CC FT REPEAT 76 83
CC FT REPEAT 84 91
CC FT DISULFID 179 214
CC FT CARBOHYD 181 181
CC FT CARBOHYD 197 197
CC SQ SEQUENCE 254 AA; 27874 MM; 50C464D516B572DF CRC64;

Query Match: 100.0%; Score 86; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1,3e-06;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3B3C3E3531B CRC64;

Query Match
Best Local Similarity 89.5%; Score 77; DB 1; Length 238;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNYR 14
Db 128 NDWEDRYRNNYR 141

RESULT 6
PRIO_THESG STANDARD; PRT; 238 AA.
ID PRIO_THESG
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP OR PRP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OC NCBI_TaxID=9565;
RN (1)
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudamit J.;
RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75383; AAB50630.1; -.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; prion; 1.
CC Pfam; PF03991; Prion, octapep; 5.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PRP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC NON_TER 1
CC SIGNAL 1
CC CHAIN 16 >238 MAJOR PRION PROTEIN.
CC DISULFID 16 199 BY SIMILARITY.
CC CARBOHYD 166 166 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
CC REPEAT 44 52 Q.
CC REPEAT 53 60 1.
CC REPEAT 61 68 2.
CC REPEAT 69 76 4.

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FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match
Best Local Similarity 89.5%; Score 77; DB 1; Length 238;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRNNYR 14
Db 128 NDWEDRYRNNYR 141

RESULT 7
PRIO_AOTTR STANDARD; PRT; 239 AA.
ID PRIO_AOTTR
AC P40245;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Aotus trivirgatus (Night monkey) (Douroucoul).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.
OC NCBI_TaxID=9505;
RN (1)
RP SEQUENCE FROM N.A.
RA MEDLINE=95139056; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor J., Cohen F.E., Prusiner S.B.;
RL "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U08293; AAC50082.1; -.
CC PIR; S53633; S53633.
CC HSSP; P04925; IAG2.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; prion; 1.
CC Pfam; PF03991; Prion, octapep; 6.
CC PRINTS; PR00341; PRION.
CC SMART; SM00157; PRP; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC NON_TER 1
CC SIGNAL 1
CC CHAIN 16 >239 MAJOR PRION PROTEIN.
CC DISULFID 171 206 BY SIMILARITY.
CC CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
CC DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
CC REPEAT 44 51 Q.
CC REPEAT 52 59 1.
CC REPEAT 60 67 2.
CC REPEAT 69 76 3.

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FT DISULFID 172 207 similarity)
FT CARBOHYD 174 174 BY SIMILARITY.
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT NON TER 241 241 5.
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 89.5%; Score 77; DB 1; Length 241;
Best Local Similarity 92.9%; Pred. No. 3.4e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNYR 14
DB 136 NDYEDRYRENNYR 149

RESULT 10
PRIO CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C).
GN PRNP.
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Cercopithecus diana (Diana monkey);
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534, 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.W., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL, U08291; AAC0080.1; -
CC EMBL, U08292; AAC0081.1; -
CC PIR, S53627; S53627.
CC HSSP, S71045; S71045.
CC HSSP, P04925; IAG2.
CC InterPro, IPR000817; Prion.
CC Pfam, PF00377; Prion; 1.
CC InterPro, IPR000817; Prion octapep; 5.
CC PRINTS, PR00341; PRION.

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DR SMART; SM00157; PRP, 1.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
FT SIGNAL 1 22 BY SIMILARITY.
FT CHAIN 23 22 MAJOR PRION PROTEIN.
FT PROPEP 223 245 REMOVED IN MATURE FORM (BY SIMILARITY).
FT LIPID 222 222 GPI-anchor amidated serine (By
FT DISULFID 171 206 similarity).
FT CARBOHYD 173 173 BY SIMILARITY.
FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 51 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 51 59 0.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT REPEAT 76 83 3.
FT REPEAT 83 83 4.
SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match 89.5%; Score 77; DB 1; Length 245;
Best Local Similarity 92.9%; Pred. No. 3.4e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDMEDRYRENNYR 14
DB 135 NDYEDRYRENNYR 148

RESULT 11
PRIO CERMO STANDARD; PRT; 246 AA.
AC Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN PRNP.
OS Cercopithecus mona. and
OC Cercopithecus neglectus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226, 36227;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL, U75386; AAB50625.1; -
CC EMBL, U75387; AAB50626.1; -
CC HSSP, P04925; IAG2.
CC InterPro, IPR000817; Prion.
CC Pfam, PF00377; Prion; 1.

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DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
FT SIGNAL 1 15
FT NON TER 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 89.5%; Score 77; DB 1; Length 246;
Best Local Similarity 92.9%; Pred. No. 3.5e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMEERYRENNYR 14
Db 136 NDYEDRYRENNYR 149

RESULT 12
PRIO_CERPA STANDARD; PRT; 246 AA.
AC Q95174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Cercopithecus patas.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=27677;
OX RN
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudamit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
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CC
CC EMBL: U75388; AAB50627.1;
CC HSPF: P04925; IAG2.

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DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.
FT SIGNAL 1 15
FT NON TER 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC5108 CRC64;

Query Match 89.5%; Score 77; DB 1; Length 246;
Best Local Similarity 92.9%; Pred. No. 3.5e-05;
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NDMEERYRENNYR 14
Db 136 NDYEDRYRENNYR 149

RESULT 13
PRIO_ATEPA STANDARD; PRT; 252 AA.
AC P51456;
DT 01-OCT-1996 (Rel. 34, Created)
DT 01-OCT-1996 (Rel. 34, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN PRNP.
OS Ateles paniscus (Black spider monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
OC NCBI_TaxID=9510;
OX RN
RN [1]
RP SEQUENCE FROM N.A.
RA TISSUE=Brain;
RC MEDLINE=95083661; PubMed=7991600;
RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,
RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdasek D.C.;
RT Infectious amyloid precursor gene sequences in primates used for
RT experimental transmission of human spongiform encephalopathy.";
RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: Belongs to the prion family.
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CC -----  
CC EMBL: U08295; AAC50084.1; -.  
CC DR PIR: S53631; S53631.  
CC DR HSP: P04156; 1B1G.  
CC DR InterPro: IPR000817; Prion.  
CC DR Pfam: PR00377; Prion\_1.  
CC DR Pfam: PR03991; Prion\_octapep; 6.  
CC DR PRINTS: PR00341; PRION.  
CC DR SMART: SM00157; PRP; 1.  
CC DR PROSITE: PS00291; PRION\_1; 1.  
CC DR PROSITE: PS00706; PRION\_2; 1.  
CC KM Prion; Glycoprotein; GPI-anchor; Repeat; Signal; Lipoprotein.  
CC FT SIGNAL 1 22  
CC FT CHAIN 23 229 MAJOR PRION PROTEIN.  
CC FT PROPEP 230 252 REMOVED IN MATURE FORM (BY SIMILARITY).  
CC FT LIPID 229 229 GPI-anchor amidated serine (By  
CC FT DISULFID 178 213 BY SIMILARITY.  
CC FT CARBOHYD 180 180 N-LINKED (GLCNAC. . .) (POTENTIAL).  
CC FT CARBOHYD 196 196 N-LINKED (GLCNAC. . .) (POTENTIAL).  
CC FT DOMAIN 51 90 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-  
CC FT REPEAT 51 58 Q.  
CC FT REPEAT 59 66 1.  
CC FT REPEAT 67 74 2.  
CC FT REPEAT 75 82 3.  
CC FT REPEAT 83 90 4.  
CC FT REPEAT 83 90 5.  
CC SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;  
Query Match 89.5%; Score 77; DB 1; Length 252;  
Best Local Similarity 92.9%; Pred. No. 3.6e-05;  
Matches 13; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Search completed: April 30, 2004, 15:23:27  
Job time : 6.70833 secs



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OM protein - protein search, using sw model

Run on: April 30, 2004, 15:28:59 ; Search time 31.2083 Seconds  
(without alignments)  
124.347 Million cell updates/sec

Title: US-09-603-832-5  
Perfect score: 86  
Sequence: 1 NDMEDRYRENMYR 14

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1138120 seqs, 277189581 residues  
Total number of hits satisfying chosen parameters: 1138120

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database :

1: /cgnt\_6/prodata/1/pubppa/US07\_PUBCOMB.pep.\*  
2: /cgnt\_6/prodata/1/pubppa/PCT\_NEW\_PUB.pep.\*  
3: /cgnt\_6/prodata/1/pubppa/US06\_NEW\_PUB.pep.\*  
4: /cgnt\_6/prodata/1/pubppa/US06\_PUBCOMB.pep.\*  
5: /cgnt\_6/prodata/1/pubppa/US07\_NEW\_PUB.pep.\*  
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8: /cgnt\_6/prodata/1/pubppa/US08\_PUBCOMB.pep.\*  
9: /cgnt\_6/prodata/1/pubppa/US09\_PUBCOMB.pep.\*  
10: /cgnt\_6/prodata/1/pubppa/US09\_PUBCOMB.pep.\*  
11: /cgnt\_6/prodata/1/pubppa/US09\_PUBCOMB.pep.\*  
12: /cgnt\_6/prodata/1/pubppa/US09\_NEW\_PUB.pep.\*  
13: /cgnt\_6/prodata/1/pubppa/US10\_PUBCOMB.pep.\*  
14: /cgnt\_6/prodata/1/pubppa/US10\_PUBCOMB.pep.\*  
15: /cgnt\_6/prodata/1/pubppa/US10\_PUBCOMB.pep.\*  
16: /cgnt\_6/prodata/1/pubppa/US10\_NEW\_PUB.pep.\*  
17: /cgnt\_6/prodata/1/pubppa/US60\_NEW\_PUB.pep.\*  
18: /cgnt\_6/prodata/1/pubppa/US60\_PUBCOMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	86	100.0	15	US-10-346-190-160	Sequence 160, App
2	86	100.0	16	US-10-346-190-164	Sequence 164, App
3	86	100.0	16	US-10-617-876-18	Sequence 18, App
4	86	100.0	26	US-10-346-190-163	Sequence 163, App
5	86	100.0	26	US-10-617-876-17	Sequence 17, App
6	86	100.0	124	US-10-050-902-324	Sequence 324, App
7	86	100.0	124	US-10-050-898-324	Sequence 324, App
8	86	100.0	124	US-10-346-190-93	Sequence 93, App
9	86	100.0	164	US-09-745-003-12	Sequence 12, App
10	86	100.0	225	US-10-301-488A-25	Sequence 25, App
11	86	100.0	226	US-10-205-194-121	Sequence 121, App
12	86	100.0	254	US-09-943-906-1	Sequence 1, App1
13	86	100.0	254	US-10-438-628-2	Sequence 2, App1
14	86	100.0	254	US-10-106-574-5	Sequence 5, App1
15	86	100.0	254	US-10-106-574-6	Sequence 6, App1

16	86	100.0	254	13	US-10-106-574-7	Sequence 7, App1
17	86	100.0	254	13	US-10-106-574-8	Sequence 8, App1
18	86	100.0	254	14	US-10-355-780-10	Sequence 10, App1
19	86	100.0	254	14	US-10-304-630-20	Sequence 20, App1
20	86	100.0	254	14	US-10-304-630-21	Sequence 21, App1
21	86	100.0	254	14	US-10-304-630-22	Sequence 22, App1
22	86	100.0	254	14	US-10-301-488A-24	Sequence 24, App1
23	86	100.0	254	15	US-10-410-907A-9	Sequence 9, App1
24	86	100.0	254	15	US-10-410-907A-10	Sequence 10, App1
25	86	100.0	254	15	US-10-346-190-87	Sequence 87, App1
26	86	100.0	254	15	US-10-435-602-1	Sequence 1, App1
27	86	100.0	350	14	US-10-050-902-323	Sequence 323, App
28	86	100.0	350	14	US-10-050-898-323	Sequence 323, App
29	86	100.0	350	15	US-10-346-190-92	Sequence 92, App1
30	86	100.0	439	13	US-10-115-984-2	Sequence 2, App1
31	77	89.5	15	15	US-10-346-190-117	Sequence 117, App
32	77	89.5	15	15	US-10-346-190-119	Sequence 119, App
33	77	89.5	15	15	US-10-346-190-121	Sequence 121, App
34	77	89.5	16	15	US-10-346-190-127	Sequence 127, App
35	77	89.5	16	15	US-10-346-190-129	Sequence 129, App
36	77	89.5	16	15	US-10-346-190-131	Sequence 131, App
37	77	89.5	16	16	US-10-617-876-24	Sequence 24, App1
38	77	89.5	25	15	US-10-346-190-116	Sequence 116, App
39	77	89.5	25	15	US-10-346-190-118	Sequence 118, App
40	77	89.5	25	15	US-10-346-190-120	Sequence 120, App
41	77	89.5	26	15	US-10-346-190-126	Sequence 126, App
42	77	89.5	26	15	US-10-346-190-128	Sequence 128, App
43	77	89.5	26	15	US-10-346-190-130	Sequence 130, App
44	77	89.5	26	16	US-10-617-876-23	Sequence 23, App1
45	77	89.5	31	14	US-10-116-061-8	Sequence 8, App1

#### ALIGNMENTS

RESULT 1  
US-10-346-190-160  
Sequence 160, Application US/10346190  
Publication No. US20030219459A1  
GENERAL INFORMATION:  
APPLICANT: Bachmann, Martin  
APPLICANT: Maurer, Patrick  
APPLICANT: Pelliccioli, Erica  
APPLICANT: Renner, Wolfgang A.  
TITLE OF INVENTION: Prio Protein Carrier-Conjugates  
FILE REFERENCE: 1700 0290003  
CURRENT APPLICATION NUMBER: US/10/346,190  
PRIOR FILING DATE: 2003-01-17  
PRIOR APPLICATION NUMBER: 60/396,590  
PRIOR FILING DATE: 2002-07-18  
PRIOR APPLICATION NUMBER: 60/393,725  
PRIOR FILING DATE: 2002-07-08  
PRIOR APPLICATION NUMBER: 60/389,898  
PRIOR FILING DATE: 2002-06-20  
PRIOR APPLICATION NUMBER: PCT/IB02/00166  
PRIOR FILING DATE: 2002-01-21  
PRIOR APPLICATION NUMBER: 10/050,902  
PRIOR FILING DATE: 2002-01-18  
NUMBER OF SEQ ID NOS: 164  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 160  
TYPE: PRT  
ORGANISM: Murine ppsort

Query Match 100.0% Score 86; DB 15; Length 15;  
Best Local Similarity 100.0%; Pred. No. 1.7e-06;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
Qy 1 NDMEDRYRENMYR 14  
Db 2 NDMEDRYRENMYR 15

## RESULT 2

US-10-346-190-164  
; Sequence 164, Application US/10346190  
; Publication No. US20030219459a1  
; GENERAL INFORMATION:  
; APPLICANT: Bachmann, Martin  
; APPLICANT: Maurer, Patrick  
; APPLICANT: Pelliccioli, Erica  
; APPLICANT: Renner, Wolfgang A.  
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates  
; FILE REFERENCE: 1700.0290003  
; CURRENT APPLICATION NUMBER: US/10/346,190  
; PRIOR FILING DATE: 2003-01-17  
; PRIOR APPLICATION NUMBER: 60/396,590  
; PRIOR FILING DATE: 2002-07-18  
; PRIOR APPLICATION NUMBER: 60/393,725  
; PRIOR FILING DATE: 2002-07-08  
; PRIOR APPLICATION NUMBER: 60/389,898  
; PRIOR FILING DATE: 2002-06-20  
; PRIOR APPLICATION NUMBER: PCT/IB02/00166  
; PRIOR FILING DATE: 2002-01-21  
; PRIOR APPLICATION NUMBER: 10/050,902  
; PRIOR FILING DATE: 2002-01-18  
; NUMBER OF SEQ ID NOS: 164  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO: 164  
; LENGTH: 16  
; TYPE: PRT  
; ORGANISM: Murine cprshort  
US-10-346-190-164

## Query Match

Best Local Similarity 100.0%; Score 86; DB 15; Length 16;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
| | | | | | | | | | | | | | | |

DB 3 NDWEDRYRYENMYR 16

## RESULT 3

US-10-617-876-18  
; Sequence 18, Application US/10617876  
; Publication No. US20040076611a1  
; GENERAL INFORMATION:  
; APPLICANT: Bachmann, Martin F  
; APPLICANT: Tissot, Alain  
; APPLICANT: Pumpens, Paul  
; APPLICANT: Cieles, Indulis  
; APPLICANT: Rehofa, Regina  
; TITLE OF INVENTION: Molecular Antigen Arrays  
; FILE REFERENCE: 1700.0310001  
; CURRENT APPLICATION NUMBER: US/10/617,876  
; PRIOR FILING DATE: 2003-07-14  
; PRIOR APPLICATION NUMBER: US 60/396,126  
; PRIOR FILING DATE: 2002-07-17  
; NUMBER OF SEQ ID NOS: 125  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO: 18  
; LENGTH: 16  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: prion peptide "cprshort"  
US-10-617-876-18

## Query Match

Best Local Similarity 100.0%; Score 86; DB 16; Length 16;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14

DB 3 NDWEDRYRYENMYR 16

## RESULT 4

US-10-346-190-163  
; Sequence 163, Application US/10346190  
; Publication No. US20030219459a1  
; GENERAL INFORMATION:  
; APPLICANT: Bachmann, Martin  
; APPLICANT: Maurer, Patrick  
; APPLICANT: Pelliccioli, Erica  
; APPLICANT: Renner, Wolfgang A.  
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates  
; FILE REFERENCE: 1700.0290003  
; CURRENT APPLICATION NUMBER: US/10/346,190  
; PRIOR FILING DATE: 2003-01-17  
; PRIOR APPLICATION NUMBER: 60/396,590  
; PRIOR FILING DATE: 2002-07-18  
; PRIOR APPLICATION NUMBER: 60/393,725  
; PRIOR FILING DATE: 2002-07-08  
; PRIOR APPLICATION NUMBER: 60/389,898  
; PRIOR FILING DATE: 2002-06-20  
; PRIOR APPLICATION NUMBER: PCT/IB02/00166  
; PRIOR FILING DATE: 2002-01-21  
; PRIOR APPLICATION NUMBER: 10/050,902  
; PRIOR FILING DATE: 2002-01-18  
; NUMBER OF SEQ ID NOS: 164  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO: 163  
; LENGTH: 26  
; TYPE: PRT  
; ORGANISM: Murine cprlong  
US-10-346-190-163

## Query Match

Best Local Similarity 100.0%; Score 86; DB 15; Length 26;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRYENMYR 14  
| | | | | | | | | | | | | | | |

DB 13 NDWEDRYRYENMYR 26

## RESULT 5

US-10-617-876-17  
; Sequence 17, Application US/10617876  
; Publication No. US20040076611a1  
; GENERAL INFORMATION:  
; APPLICANT: Bachmann, Martin F  
; APPLICANT: Tissot, Alain  
; APPLICANT: Pumpens, Paul  
; APPLICANT: Cieles, Indulis  
; APPLICANT: Rehofa, Regina  
; TITLE OF INVENTION: Molecular Antigen Arrays  
; FILE REFERENCE: 1700.0310001  
; CURRENT APPLICATION NUMBER: US/10/617,876  
; PRIOR FILING DATE: 2003-07-14  
; PRIOR APPLICATION NUMBER: US 60/396,126  
; PRIOR FILING DATE: 2002-07-17  
; NUMBER OF SEQ ID NOS: 125  
; SOFTWARE: PatentIn version 3.2  
; SEQ ID NO: 17  
; LENGTH: 26  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: prion peptide "cprlong"  
US-10-617-876-17

## Query Match

Best Local Similarity 100.0%; Score 86; DB 16; Length 26;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
| | | | | | | | | | | | | | | | | |  
Db 13 NDWEDRYRENMYR 26

## RESULT 6

US-10-050-902-324  
; Sequence 324, Application US/10050902  
; Publication No. US20030175290A1  
; GENERAL INFORMATION:  
; APPLICANT: Renner, Wolfgang A.  
; APPLICANT: Bachmann, Martin  
; APPLICANT: Tissot, Alain  
; APPLICANT: Maurer, Patrick  
; APPLICANT: Lechner, Franziska  
; APPLICANT: Seibel, Peter  
; APPLICANT: Plosssek, Christine  
; TITLE OF INVENTION: Molecular Antigen Array  
; FILE REFERENCE: 1700.0190004  
; CURRENT APPLICATION NUMBER: US/10/050,902  
; CURRENT FILING DATE: 2002-01-18  
; PRIOR APPLICATION NUMBER: US 60/262,379  
; PRIOR FILING DATE: 2001-01-19  
; PRIOR APPLICATION NUMBER: US 60/288,549  
; PRIOR FILING DATE: 2001-05-04  
; PRIOR APPLICATION NUMBER: US 60/326,998  
; PRIOR FILING DATE: 2001-10-05  
; PRIOR APPLICATION NUMBER: US 60/331,045  
; PRIOR FILING DATE: 2001-11-07  
; NUMBER OF SEQ ID NOS: 350  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 324  
; LENGTH: 124  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: mPrp construct  
US-10-050-902-324

Query Match 100.0%; Score 86; DB 14; Length 124;  
Best Local Similarity 100.0%; Pred. No. 1.5e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
| | | | | | | | | | | | | | | | | |  
Db 23 NDWEDRYRENMYR 36

## RESULT 7

US-10-050-898-324  
; Sequence 324, Application US/10050898  
; Publication No. US2003017571A1  
; GENERAL INFORMATION:  
; APPLICANT: Renner, Wolfgang A.  
; APPLICANT: Bachmann, Martin  
; APPLICANT: Tissot, Alain  
; APPLICANT: Maurer, Patrick  
; APPLICANT: Lechner, Franziska  
; APPLICANT: Seibel, Peter  
; APPLICANT: Plosssek, Christine  
; APPLICANT: Ortman, Rainer  
; APPLICANT: Luond, Rainer  
; APPLICANT: Staudeniel, Matthias  
; APPLICANT: Frey, Peter  
; TITLE OF INVENTION: Molecular Antigen Array  
; FILE REFERENCE: 1700.0190005  
; CURRENT APPLICATION NUMBER: US/10/050,898  
; CURRENT FILING DATE: 2002-01-18  
; PRIOR APPLICATION NUMBER: US 60/262,379  
; PRIOR FILING DATE: 2001-01-19  
; PRIOR APPLICATION NUMBER: US 60/288,549  
; PRIOR FILING DATE: 2001-05-04

; PRIOR APPLICATION NUMBER: US 60/326,998  
; PRIOR FILING DATE: 2001-10-05  
; PRIOR APPLICATION NUMBER: US 60/331,045  
; PRIOR FILING DATE: 2001-11-07  
; NUMBER OF SEQ ID NOS: 350  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 324  
; LENGTH: 124  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Protein sequence of mPrp  
US-10-050-898-324

Query Match 100.0%; Score 86; DB 14; Length 124;  
Best Local Similarity 100.0%; Pred. No. 1.5e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
| | | | | | | | | | | | | | | | | |  
Db 23 NDWEDRYRENMYR 36

## RESULT 8

US-10-346-190-93  
; Sequence 93, Application US/10346190  
; Publication No. US20030219459A1  
; GENERAL INFORMATION:  
; APPLICANT: Bachmann, Martin  
; APPLICANT: Maurer, Patrick  
; APPLICANT: Pellidoni, Erica  
; APPLICANT: Renner, Wolfgang A.  
; TITLE OF INVENTION: Protein Carrier-Conjugates  
; FILE REFERENCE: 1700.0290003  
; CURRENT APPLICATION NUMBER: US/10/346,190  
; CURRENT FILING DATE: 2003-01-17  
; PRIOR APPLICATION NUMBER: 60/396,590  
; PRIOR FILING DATE: 2002-07-18  
; PRIOR APPLICATION NUMBER: 60/393,725  
; PRIOR FILING DATE: 2002-07-08  
; PRIOR APPLICATION NUMBER: 60/389,898  
; PRIOR FILING DATE: 2002-06-20  
; PRIOR APPLICATION NUMBER: PCT/IB02/00166  
; PRIOR FILING DATE: 2002-01-21  
; PRIOR APPLICATION NUMBER: 10/050,902  
; PRIOR FILING DATE: 2002-01-18  
; NUMBER OF SEQ ID NOS: 164  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 93  
; LENGTH: 124  
; TYPE: PRT  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: mPrp  
US-10-346-190-93

Query Match 100.0%; Score 86; DB 15; Length 124;  
Best Local Similarity 100.0%; Pred. No. 1.5e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
| | | | | | | | | | | | | | | | | |  
Db 23 NDWEDRYRENMYR 36

## RESULT 9

US-09-745-003-12  
; Sequence 12, Application US/09745003  
; Patent No. US20020042122A1  
; GENERAL INFORMATION:  
; APPLICANT: Bazar, Fernando J  
; TITLE OF INVENTION: Human Proteins; Related Reagents  
; FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003  
CURRENT FILING DATE: 2000-12-20  
NUMBER OF SEQ ID NOS: 13  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 12  
LENGTH: 164  
TYPE: PRT  
ORGANISM: rodent  
US-09-745-003-12

Query Match 100.0%; Score 86; DB 9; Length 164;  
Best Local Similarity 100.0%; Pred. No. 2e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 52 NDWEDRYRENMYR 65

RESULT 10  
US-10-301-488A-25  
Sequence 25, Application US/10301488A  
Publication No. US20030166558A1  
GENERAL INFORMATION:  
APPLICANT: FRANGIONE, Blas  
APPLICANT: MISNIEWSKI, Thomas  
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND  
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,  
TITLE OF INVENTION: ALPHA-SYNOCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN  
FILE REFERENCE: 5986/1K434051  
CURRENT APPLICATION NUMBER: US/10/301,488A  
CURRENT FILING DATE: 2002-11-21  
PRIOR APPLICATION NUMBER: US 60/331,801  
PRIOR FILING DATE: 2001-11-21  
NUMBER OF SEQ ID NOS: 55  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 25  
LENGTH: 225  
TYPE: PRT  
ORGANISM: Rat  
US-10-301-488A-25

Query Match 100.0%; Score 86; DB 14; Length 225;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 115 NDWEDRYRENMYR 128

RESULT 11  
US-10-205-194-121  
Sequence 121, Application US/10205194  
Publication No. US20030134301A1  
GENERAL INFORMATION:  
APPLICANT: Warner-Lambert Company  
APPLICANT: Lee, Kevin  
APPLICANT: Dixon, Alstair  
APPLICANT: Brooksbank, Robert  
TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain  
FILE REFERENCE: NL-A-018201  
CURRENT APPLICATION NUMBER: US/10/205,194  
CURRENT FILING DATE: 5200-07-24  
PRIOR APPLICATION NUMBER: GB 0118354.0  
PRIOR FILING DATE: 2001-07-27  
NUMBER OF SEQ ID NOS: 177  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 121  
LENGTH: 226

TYPE: PRT  
ORGANISM: Rattus norvegicus  
FEATURE:  
OTHER INFORMATION: PRT  
US-10-205-194-121

Query Match 100.0%; Score 86; DB 14; Length 226;  
Best Local Similarity 100.0%; Pred. No. 2.8e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 115 NDWEDRYRENMYR 128

RESULT 12  
US-09-943-906-1  
Sequence 1, Application US/09943906  
Patent No. US20020150572A1  
GENERAL INFORMATION:  
APPLICANT: Prusiner, Stanley B.  
Williamson, R. Anthony  
Burton, Dennis R.  
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP  
NUMBER OF SEQUENCES: 86  
CORRESPONDENCE ADDRESS:  
ADDRESSER: Fish & Richardson P.C.  
STREET: 2200 Sand Hill Road  
CITY: Menlo Park  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Diskette  
COMPUTER: IBM compatible  
OPERATING SYSTEM: DOS  
SOFTWARE: FastSeq Version 2.0  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/943,906  
FILING DATE: 30-Aug-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 09/550,374  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Bozicevic, Karl  
REGISTRATION NUMBER: 28,807  
REFERENCE/DOCKET NUMBER: 06510/059001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 415-854-5277  
TELEFAX: 415-854-0875  
TELEX: <Unknown>  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 254 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
SEQUENCE DESCRIPTION: SEQ ID NO: 1:  
US-09-943-906-1

Query Match 100.0%; Score 86; DB 9; Length 254;  
Best Local Similarity 100.0%; Pred. No. 3.2e-05;  
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NDWEDRYRENMYR 14  
DB 142 NDWEDRYRENMYR 155

RESULT 13  
US-10-438-628-2

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; Sequence 2, Application US/10438628
; Publication No. US20040048237A1
; GENERAL INFORMATION:
; APPLICANT: Lindquist et al.
; TITLE OF INVENTION: MAMMALIAN PRION PROTEINS AND TRANSGENIC MICE EXPRESSING THEM
; FILE REFERENCE: WBL-P01-004
; CURRENT APPLICATION NUMBER: US/10/438,628
; PRIOR FILING DATE: 2003-05-15
; PRIOR APPLICATION NUMBER: 60/380950
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/380953
; PRIOR FILING DATE: 2002-05-15
; PRIOR APPLICATION NUMBER: 60/419569
; PRIOR FILING DATE: 2002-10-17
; PRIOR APPLICATION NUMBER: 60/419574
; PRIOR FILING DATE: 2002-10-17
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-438-628-2

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Query Match          100.0%; Score 86; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NMEDRYRENMYR 14
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Db      142 NMEDRYRENMYR 155

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RESULT 14
US-10-106-574-5
; Sequence 5, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-5

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Db      142 NMEDRYRENMYR 155

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RESULT 15
US-10-106-574-6
; Sequence 6, Application US/10106574
; Publication No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Disease
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8

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; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 6
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-6

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Query Match          100.0%; Score 86; DB 13; Length 254;
Best Local Similarity 100.0%; Pred. No. 3.2e-05;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY      1 NMEDRYRENMYR 14
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Db      142 NMEDRYRENMYR 155

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Search completed: April 30, 2004, 15:35:04
Job time : 32.2083 secs

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